Croonian Lectures

ON THE

HYGIENIC AND CLIMATIC TREATMENT OF CHRONIC PULMONARY PHTHISIS.

Delivered at the Royal College of Physicians,

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LECTURE III.

5. Climates.—Purity of Air the most important element.—Floating Matters.—Climates of Elevated Regions.—Objections met.—General Characters.—Physiological and Therapeutical Actions.—Swiss Alps.—Peruvian Andes.—Rocky Mountains.—South African Highlands.—Home Climates.

MR. PRESIDENT AND GENTLEMEN,—It is difficult to say anything new on the treatment of phthisis by *climate*, as the literature on the subject is rich in good articles. I need only mention the names of Sir James Clark, Walsh, J. E. Pollock, King Chambers, J. H. Bennet, C. J. B. Williams and C. Theodore Williams, Thorowgood, F. and P. Niemeyer, Rohden, Jaccoud, Biermann, Thilenius, H. Hassall, Sée, Symes Thompson, Marcet, Clifford Allbutt, Burney Yeo, Sparks, Denison, Solly, and Tyndale. The remarks which I am going to make can only be very fragmentary.

The difference between different cases of phthisis is so great that it is impossible to lay down fixed rules for climatic treatment. In deciding between different climates and localities, the circumstances connected with the etiology, the stage of the disease, the amount of destruction, and the complications with diseases of other organs are very important; but still more so the distinction between a weak and a strong constitution, an excitable or a torpid nature—between progressive and retrogressive, active or stationary, cases. Mental peculiarities, too, ought not to be overlooked; nor the habits of the invalid and the circumstances in which he has lived. Unlike, however, as different invalids are in these and other points, in all of them we must bear in mind that we have to deal with raw and ulcerated surfaces in the respiratory passages; surfaces which in most cases, at all events, are infected by a specific microbe, and are very susceptible to all impurities of the atmosphere, and especially to the microbe element, which abounds wherever organic decomposition, and particularly putrefaction, takes place, and wherever there are congregations of human beings and animals in shut-up localities. Hence it is clear that *purity* or an *aseptic state* of the air is the first demand which we ought to make on the climates to which we send persons affected with phthisis. Temperature, the degree of moisture, atmospheric pressure, light and sunshine, electricity, wind, frequency or absence of rain and snow, nature of soil, elevation above the plain or the sea, which in their varying combinations form the different climates, are each and all-important agents in the climatic treatment, as I have endeavoured to show elsewhere; but none is so essential to the consumptive patient as the purity of the atmosphere. After what I have said before on the necessity of pure air and its renewal in rooms, it is scarcely necessary to add here that in every climate the position and the internal arrangements of the house, and particularly of the rooms in which the invalid is to live, are as important as the character of the climate of the place. In former years the composition of the air in its influence on health was judged principally by the amount of oxygen, nitrogen, carbonic acid, ammonia, and water, but of late attention has been forcibly directed to the amount of *floating matter* in the air by Ehrenberg, Pasteur, Tyndall, Maddox, and others; and a great accession to our knowledge and a fuller appreciation of the influence of the atmosphere has been obtained by the interesting labours of Miguel at the Observatoire de Montsouris, near Paris, to which Professor Sée has directed my attention, and the result of which has been mentioned by Dr. Poore in his Cantor lectures, already alluded to. Miguel gives us the following interesting table of the number of bacteria found in ten cubic metres of air taken as nearly as possible at the same time in July, 1883:—

1. At an elevation of from 2000 to 4000 metres	None
2. On the lake of Thun (560 metres)	8·0
3. Near the Hôtel Bellevue, Thun (560 metres)	25·0
4. In a room of the Hôtel Bellevue	600·0
5. In the Park of Montsouris, near Paris ...	7600·0
6. In Paris itself (Rue de Rivoli)	55,000·0

This table shows clearly, as I have already pointed out, the difference not only between a high and low elevation and between town and suburb, but also between in-door and out-door air; the air in a room of the Hôtel Bellevue containing twenty-four times as many microbes as the air in the grounds outside. The difference between the air on the lake of Thun (8·0) and on the shore—i.e., the grounds of the Hôtel Bellevue (25·0)—is likewise significant; and the low rate on the former may be ascribed to the distance from the sources of organic decomposition. We may reasonably infer that a still greater rarity of microbes will be found in the air on high sea. Similar researches into the purity of the air are being energetically pursued at Berlin, but I am not yet acquainted with the result.

Another point of consideration is, How far do climates and health resorts assist the invalid in improving the general nutrition and power of resistance? This depends to a great degree on their enabling the invalid to be much in the open air and take active exercise without risk of chills and consequent complications. Not all the climates, however, which allow the invalid to be much in the open air are at the same time conducive to active exercise. Some are apt to produce a feeling of languor and diminished inclination for food, while others raise the nervous system, improve the appetite, digestion, sanguinification and muscular energy, and facilitate the elimination of used-up matter. We may, in some points, compare climates with medicines. There are such medicines, as morphia, which soothe the cough and procure sleept, but check the appetite and nutrition in many people. Antipyrin has a wonderful power in subduing pyrexia, but in almost all my trials of its effect on the pyrexia of consumptive patients it has entirely suppressed the appetite. Such medicines ought, therefore, to be avoided in the majority of hopeful cases of phthisis, because the improvement of the nutrition is the first demand. So there are agreeable climates which soothe the cough, but diminish the appetite and the inclination to take exercise, and can, therefore, be recommended only in exceptional cases. On the other hand, bitter remedies and tonics do not soothe the cough; but if they improve the appetite they often exercise a beneficial influence on the course of phthisis. In the same way cold does not soothe cough, but, on the contrary, sometimes produces it at first; but if it improves the appetite of the consumptive person, and enables him to take more exercise, it improves the nutrition, and thus exercises a beneficial influence on the course of phthisis. The consideration of such qualities of climate is all-important in the treatment of phthisis, though these characters are not shown by meteorological tables, however carefully prepared; they must be learned from personal observation and from carefully watching invalids and their healthy companions. In these points lies the difference between what are popularly called relaxing and bracing climates. We will not, however, disregard meteorological tables and descriptions, for from these we often learn important facts about the nature and strength of wind, the frequency of mist and rain, the conditions of temperature, the degree of humidity, the amount of sunshine, so that we can avoid sunless and depressing climates, with frequent cold wind, mist, rain, and drizzle, which prevent the invalids from taking a sufficiency of out-door exercise. Unsatisfactory, however, as these influences are there are others to be much more dreaded, as crowding together of many human beings, stagnation of air, presence of decaying substances, organic dust, lowness of situation, and dampness of soil (Bowditch and Buchanan).

Many people still cling to the idea that cold is injurious and warmth curative in phthisis, but this idea is quite incorrect. Another idea that equable climates are the best in the treatment of phthisis should likewise be much restricted. The most important point of all good climates in phthisis, as I have said before, is purity of air. This is to be found, first, on elevated regions; second, in the desert; third, on the sea. The first two are usually considered

under the great division of inland climates, the third under marine climates. In rapidly glancing over these divisions, I shall have the opportunity of mentioning some other localities which are used as health resorts in phthisis, although they could not claim pure air, or air of an aseptic character, as one of their prominent features.

Allow me, gentlemen, to begin with the climates of elevated regions (altitude or mountain climates), which only in comparatively recent times have come into favour in Europe; although they were used in Peru at an earlier period (Archibald Smith). They were somewhat roughly treated in the beginning. A justly esteemed author on diseases of the lungs, for instance, in 1871 calls the plan of treating consumptive patients by long residence in the Alps "a startling quasi-sensational novelty in climatic therapeutics" in reference to a paper of mine "On the Treatment of Phthisis by Prolonged Residence in Elevated Regions" in the Medical and Chirurgical Transactions of 1869. In further discussing this plan the same author speaks of the winter in an "elevated site in Switzerland" as a sojourn "amid mist, fog, damp, the fiercest cold, frost, ice, and snow." Surely, great physician though he is, he is somewhat misinformed on this subject, and has not himself visited the High Alps during winter, but has possibly formed his impressions from a writer who practised during winter in Southern Italy. I shall discuss the author's objections *seriatim*, as this will show the character of the climate.

1. The "mist" and "fog" amid which he imagines the patient to be during winter in the High Alps exist, indeed, only in imagination. They are at all events excessively rare in those high valleys in winter, and when Zurich, Berne, and Basle are for days together wrapped in dense mist, the sky is most blue in the High Alps, and the air perfectly transparent and transcalent. M. Billwiller, the head of the Meteorological Department in Switzerland, has quite lately organised a system of recording sunshine at different meteorological stations, and I have, by chance, before me the comparison between Zurich and Davos, during the months of last November and January (having mislaid the number for December). At Zurich the amount of sunshine during the month of November was 48½ hours, or an average per day of 1 hour 36½ minutes; ditto at Davos, 128 hours, or 4 hours 16 minutes per day. During the month of January at Zurich the recorded sunshine was 37 hours, or 1 hour 11 minutes per day, the same at Davos, 137·8 hours, or 4¾ hours per day. All those authors who are thoroughly acquainted with the winter in the Alps, as Spengler, Waters, Frankland, Ludwig, Volland, Addington Symonds, Theodore Williams, and Jaccoud, amongst others, have described the absence of mist and the abundance of sunshine, and it is only a corroboration of their statements, when I add, that while at Zurich and in the whole of the lower regions of Switzerland a thick mist entirely shut out the rays of the sun from the 18th to the 27th of January last, 6 hours of sunshine were registered daily at Davos, and what kind of sunshine this is the dwellers in the lower regions who have never been in the High Alps during winter can scarcely imagine. At the end of November, 1869, I spent on the Piz Languard, about 10,700 feet above sea level, and on an ice pyramid of the Morteratsh glacier (about 9700 feet) more than 1½ hours on two consecutive days without an overcoat. As long as I remained in the sun I never felt warmer in August and September at the same localities, but in the shade an overcoat would have been just a comfort, though I did not feel cold in spite of a temperature of only 20° to 25° F., the air being perfectly calm. A black bulb thermometer *in vacuo* showed in the sun between 88° and 92° F., while an ordinary thermometer showed only between 31° and 32° F., and the exhaled breath became rapidly condensed. This shows that the air itself was only slightly heated by the sun's rays, though the body covered with woollen clothes had all the benefit of the warming rays. I specially mention this difference between the black bulb and the ordinary thermometer because it shows that the air inhaled is cold, to which point I shall later return. During these two days a dense mist prevailed in the lower part of Switzerland and Upper Italy.

2. How can the author call the air damp, and how has he obtained this notion? Dr. Frankland speaks of the "excessive dryness of the air at Davos," and further on says, "The absence of suspended watery particles in the air has no doubt very considerable influence in preventing the chilling of the skin." I need only consider the facts that air at a low temperature can hold only a very small quantity of watery vapour, and that if that small maximum is reached the vapour must become condensed in the shape of mist or fog, the rarity of which I have already mentioned; and the usual transparency and transcalency show likewise that the quantity of suspended vapour can be only very small. All the authors agree on this point, and Dr. Volland and Mr. Waters have further pointed out that also the air in the rooms is very dry, indeed, even drier than out of doors. Mr. Waters found the relative humidity in his bed-room at Davos during the winter 1881-82 varying from 25° to 35°; the temperature of the room being about 60° F. with an open window at night.

3. "The fiercest cold and frost" of which our author speaks is scarcely felt by the patients at Davos or St. Moritz; Spengler, Waters, Frankland, Unger, A. Symonds, Theodore Williams, Ludwig, Rohden, Peters, and myself, as well as many others, have often discussed this question. The main points which prevent the cold being much felt are:—(1) That the air is dry; (2) that it is calm; and (3) that the sun heat is very great. In an excellent article in a recent number of the *Practitioner* on "Winter Health Resorts" the same question is discussed. "The temperature of the human body depends very much on the dryness of the air. A Canadian feels it much colder at 4° below freezing-point in London than in Canada when the thermometer stood at 40° below zero. The dryness of the air in Canada more than compensates for a difference of 68°. Dry air has very little capacity for heat, so that when it is at rest it conducts away very little heat from the body." Wind changes the matter very considerably; but wind, as I have said, is rare during winter in the chief Alpine health resorts; partly through the shelter of the mountains, partly through the absence of local winds, as every place is covered with snow. In summer there is much more wind, and it is then often very disagreeable, and unless care is taken chilling; but it is not so injurious as it would be in winter. I have spoken already of the great sun heat, and the papers of Waters, Frankland, and others are well known. The result of this sunshine and absence of wind is that even rather delicate invalids can sit for many hours lightly covered on open terraces and in verandahs, or on seats, along the southern slopes of the mountains or round the ice-rink; that they can frequently drive in sledges and take short walks; while the hardier ones can join in long excursions, in skating, and tobogganing; the time passes quickly and the majority of invalids manage to be more in the open air than on the Riviera. Is the calm, dry cold of the Alpine winter health resorts injurious? My answer is decidedly, No. It is not only not injurious, but beneficial to all those who are suited to this climate. When warmly dressed, the invalids who are able to walk can be out, even if there is no sun, provided there is no strong, cold wind; and the majority of them can with reasonable precautions in dressing even walk on calm evenings. The danger of becoming chilled at the time of sunset is far less than in the Riviera climates. It is only a remnant of our old prejudice which can make us afraid of dry, calm, moderate cold. A consumptive patient is in a better condition for recovery if he lies on a couch in a judiciously selected spot in the open air even in winter than in a shut-up room. The low temperature of the air has the obvious advantage that the bacillus and other microbes cannot thrive in it, and that putrefaction is arrested. In addition to this, the low temperature of the inhaled air leads to loss of heat, and of a large amount of water. This, I presume, acts as well in an antiphlogistic as also in an antiseptic way; and it may arrest the disease by drying up a sore and by checking the thriving of the bacillus within the lungs. The diminution of the expectoration observed in many cases is partly due to it, and, perhaps, also that of the night perspiration. The pulmonary circulation becomes increased, in order to supply the water lost, and the energy of the right heart, and of the cells and tissues of the lungs, must be likewise favourably influenced. The respiratory thoracic movements cannot escape being rendered more active, and through this expansion of the thorax, strengthening of the thoracic muscles and a help to all the respiratory acts. It is not too much to say that a great part of the favourable influence of the winter climate of the High Alps takes place through the increased inhalation of this cold, dry, pure, and rarefied air.

4. I fully acknowledge the author's correctness with regard to ice and snow in the winter climate of the High Alps, but with this I find as little fault as with the calm cold air. Indeed, they are almost inseparable, for the ice and snow

which cover the ground prevent dust and decay, and the microbe laden emanations from the soil. The calmness of the air, the absence of local winds ("Thal" and "Berg" winds), are in great part due to the ground being covered with ice and snow; furthermore, where the roads are for months together covered with snow, the invalid can walk on them without the danger of wet feet, and the healthful exercises of sledging, tobogganing, and skating for the more hardy invalids and their companions are certainly not to be despised.

After having discussed the bad character of our author's Alpine winter I must devote a few minutes to the purity and rarefaction of the air. The purity, or aseptic character, is intimately connected with the cold, ice, and snow, and also with the sparseness of population and industries. To this point, and particularly to the comparative absence of spores, I had always been inclined to ascribe the favourable influence of residence at high elevations on phthisis; and when Professor Tyndall in 1868 directed my attention to Pasteur's researches, published in 1862, I became strengthened in this view, which I mentioned at the Medical and Chirurgical Society in 1869. The facts published by Miguel, and already quoted above, as to the absence of microbes in the Alps at localities above 2000 metres, strikingly show the purity of the air. I am not, however, blind to the fact that wherever a large number of human beings, especially invalids, congregate, there the purity of the air is likely to be impaired. The rarefaction or rarity of the air with which its lightness or diminution of pressure is intimately associated has been the subject of many theories; for instance, as causing a starvation of oxygen and the peculiar kind of mountain anæmia, of the existence of which, however, I have not been able to convince myself in the Alps. What seems to be certain is that more blood flows to the surface of the skin, that this organ becomes better nourished, that internal organs become in proportion somewhat unloaded, and, further, that the separation of carbonic acid from the blood in the lungs is facilitated (Marcet and Chermond). I am less certain with regard to the view that a diminished quantity of oxygen contained in a given quantity of air leads to the inspiration of a larger volume of air, and through this to a greater expansion of the lungs and thorax. This theory has been quite lately expounded in a very plausible way by Professor Jaccoud, a great advocate of the curative effect of Alpine climates, in his valuable work on phthisis, of which a good English edition by Dr. Lubbock has just been published. I am not prepared to say that this view is incorrect; but, as I have pointed out already in 1869, and in later communications on the subject, the experiments of Frankland and Tyndall on the burning of candles on the top of Mont Blanc and at Chamounix show that, although the light-giving power of the flame is much less on the top of Mont Blanc, the quantity of stearine consumed, or, in other words, the energy of combustion, is almost precisely the same as at Chamounix. This remarkable result is ascribed by the author of the experiment to the greater mobility of the atoms in the rarefied air, "making atonement for the smallness of their number by the promptness of their action." I can corroborate the experience of Dr. Theodore Williams regarding the increase of the circumference of the thorax, and especially of the diseased side of the chest in several of those cases which have shown a satisfactory progress. I am not, however, sure that this is due to the rarity of the oxygen, as the inhalation of the dry cold air already accounts for it. Whether the thinner air of high regions is unable to hold the microbes floating, and whether in this way rarefaction is a source of purity, as Miguel seems to think, I am not able to say; but this point could, I should think, be settled by experiment.

I must deny myself the pleasure of further entering into the details of the peculiarities of mountain air and mountain health resorts. The main physical features important to us are:—1. The purity or aseptic nature; the comparative absence of floating matter. 2. Dryness of the air and soil; comparative absence of mist. 3. The coldness or coolness of the air temperature and the great warmth of the sun temperature. 4. The rarefaction and low pressure of the air. 5. The intensity of the light. 6. The stillness of the air in winter. 7. A large amount of ozone. The effects on the invalid suited to such climates are—increase of appetite, improvement of sanguification and general nutrition, strengthening of the heart and circulation, raising of muscular and nervous energy, and of activity of the skin. Under the influence of such constitutional progress, which is assisted by the local action of the aseptic dry and cold air by increased ventilation of the lungs, and by compression of the diseased parts through healthy and emphysematous dilatation of the surrounding tissue, we observe a gradual improvement in the state of the lungs, leading to arrest of the disease and actual cure.

(To be concluded.)

THE RADICAL CURE OF VARICOCELE.

By HENRY LEE, F.R.C.S.,
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THE difficulty of performing an operation for the radical cure of varicocele which is at once safe and effective, without any prolonged after-treatment, is evidenced by the number of different proceedings which have of late been advocated. Favourable results have been obtained by most or all of these methods where the veins have been simply enlarged; but in the severer cases, especially when accompanied by a relaxed condition of the skin of the scrotum, the benefit derived from the operation has been only temporary.

The operation which I have now been in the habit of performing for some years in such cases is as follows. The surgeon's hands and instruments are washed in a solution of carbolic acid and wiped dry. The patient is placed in a convenient position, generally on the left side of the bed, under the influence of ether. A portion of the skin of the scrotum is then pulled up and removed either by curved scissors or a knife. The longest diameter of the wound should be transverse. The edges of the wound separate to a considerable distance. The enlarged veins are rolled between the finger and thumb, and can easily be distinguished from the vas deferens. Should there be an artery of any size among the veins its pulsation can be felt, and in that case it is separated from the veins before the operation is continued. A hare-lip needle is then introduced through the wound under some of the veins, and a figure-of-8 ligature tied round its ends over the veins. The same thing is done with another needle about half an inch distant. A thin knife is then introduced on the flat beneath the veins, its edge turned towards the veins, and the veins divided. An ordinary iron cautery, previously heated in the fire, is dabbed on a wet sponge until very little steam is produced; the cautery is then applied to the extremity of the divided veins, and allowed to remain quietly in contact with them for a quarter or half a minute. The tissues adhere firmly to the iron and to each other, and the blood is firmly coagulated in the veins. In order not to disturb the parts by any unnecessary violence, the tissues are gently separated from the cautery by the handle of a scalpel. The needles placed under the veins are now removed and the edges of the wound brought together by short fine hare-lip pins, or by a continuous suture of carbolised catgut. The loss of blood in this operation often does not exceed a teaspoonful. The wound generally heals in great part by first intention. The cautery, applied as described, produces no slough. The charred surface is absorbed, as are also the clots in the veins. At the end of forty-eight hours the patient may be removed to a sofa, and may leave the house within a week.

The son of a medical man had for years been troubled with greatly enlarged veins and a relaxed scrotum, accompanied with occasional pain. He was operated upon on a Wednesday, and went down to Brighton on the following Tuesday. An officer in the army, having little time at his command, and wishing particularly to see his friends before rejoining his regiment, had the operation performed and left London within a week. In both these cases the result was most satisfactory. Details of cases might readily be multiplied.

The only inconvenience that has arisen is that in some instances a portion of the wound has been long in healing, but this is accompanied with no pain, and does not prevent the patient going about his usual avocations. It may, however, not be altogether a disadvantage to allow the wound to granulate, as the longer that action continues, the firmer will be the cicatrix. The one danger in operating for varicocele is absorption by the open mouths of the veins. If these are effectually closed a wound in the scrotum may be safely treated in the same way as a wound on any other part of

the body, and it requires no very particular attention. When a vein is divided by ligature, or if a rod-hot cautery be applied, some amount of ulceration and suppuration necessarily takes place. Both these processes are incompatible with the adhesive action, and the latter can only commence when the former has ceased. If a ligature be applied to a vein, a patient is never safe so long as it is ulcerating its way through; and the same may be said when a portion of the vein is made to slough by the application of the red-hot iron or by the galvanic cautery. The caution that surgeons have always shown in dealing with veins affords abundant evidence of the risks incurred if the veins be not completely closed. This object is effectually accomplished by the application of the actual cautery as above described. The parts are glued together before the operation is completed, a chemical adhesion of the different tissues takes place, the blood in the veins is firmly coagulated, and the vessels are securely sealed.

The removal of a portion of the skin in front of the scrotum as a remedy for varicocele was first, I believe, practised by Dieffenbach, and was advocated by the late Mr. Briggs. In an able memoir published by Dr. Henry, Surgeon to the New York Dispensary, he gives the credit to Sir Astley Cooper of having originally suggested the operation of "amputation of redundant scrotum in the treatment of varicocele." While this operation, he says, had met with much favour and been attended by successful results in New York, it has been comparatively neglected in England, Germany, and France.[1] Mr. Wormald proposed to lessen the scrotal bag by drawing a portion of it through a ring which was worn during the daytime. This is a plan of treatment not uncommon in the present day. The persistency with which patients affected with varicocele occasionally wear these rings and different kinds of suspensory bandages indicates conclusively the relief which they sometimes afford. As long, however, as the veins are left in a varicose condition, the disease cannot be cured. The practice soon, therefore, came into use of obliterating the veins by ligature, and later still by subcutaneous section. A large proportion of the cases in which the last-named operation has been performed have been permanently cured, some have been relieved, and in some the varicocele has become as troublesome as before.

The cases which have been the least successful are those in which the skin of the scrotum has lost its natural elasticity and become relaxed and redundant. The difficulty of dealing with such cases first suggested to me the plan of combining the operation of dividing the veins with that of removing a portion of the skin of the scrotum. This operation may be modified to suit individual cases, but in principle it is that which I am now in the habit of performing. The use of an anæsthetic entirely removes any objections that might be made to the use of the actual cautery on account of any pain which it might be supposed to produce in these operations. Patients sometimes, but very seldom, complain of some burning pain afterwards, but they certainly do not complain more than when the veins are subcutaneously divided. It is well that the bleeding should be completely controlled by pressure before the cautery is applied, otherwise the blood prevents the cautery from remaining fairly in contact with the orifices of the vessels. This may be the case if the iron be heated above the boiling-point of water. There is then a danger of the blood instead of coagulating being boiled, and also of the surrounding tissues being destroyed, instead of adhering to each other. The great advantage of operating with the actual cautery is that the divided vessels are completely sealed, and if the operation be properly performed no bleeding occurs, and no coagula are left in the wound. But that which is of far greater importance is that no absorption can take place through the veins. This is, in fact, the object of all antiseptic dressings. As far as any constitutional effects are concerned, lymphatic absorption is, I believe, unknown as a consequence of the operation above described.

The late Sir James Simpson was in the habit of relating how, after the American War, when he entertained some of the Northern surgeons at dinner, he told them that he believed that they had been in the habit of poisoning the wounds of the Southern soldiers who fell into their hands. The medical officers laughed at the idea; Sir James persisted, and the officers became angry. At length he explained to them that the pieces of flesh, including the divided extremities of the arteries, which were strangulated by ligatures died, decomposed, and were apt to poison the wounds. It is these decomposing particles which have necessitated the various forms of antiseptic dressing which have of late been so profusely used. But if the veins be closed, no such absorption can take place. In surgical operations where the veins can be completely sealed, as in cases of varicocele, venous absorption may be prevented with the greatest certainty.

Many years ago a patient presented himself at St. George's Hospital in whom the scrotum was so relaxed that when he lay upon his back the testes would hang over on the outer side of the left thigh. There was a well-marked varicocele. It was thought practicable to remove a large portion of the skin of the scrotum, and to obliterate the veins at the same time. Two needles were introduced under the most prominent veins far apart. Over the ends of each needle a figure-of-8 ligature was passed, so as to command any bleeding from the veins. The intermediate portion of skin, together with the subjacent tissues containing the enlarged veins, was then removed, leaving a very considerable gap. No hæmorrhage occurred. The needles were then drawn towards each other and the edges of the wound held in position. The wound readily healed, and the testis was subsequently retained very nearly in its natural position. This was the first case in which this operation was performed. Previous to that time no one thought of cutting deeper than the skin, as no means were then in use which would effectually control hæmorrhage from the spermatic veins. In the operation which I now perform the portion of skin to be removed is dealt with first, and the veins divided afterwards. The veins are sealed so as to prevent hæmorrhage on the one hand and absorption on the other, and the needles at once removed.

In cases of varicocele where the scrotum is not relaxed, the subcutaneous division of the veins answers very well without the removal of any skin. It was originally proposed to allow the needles which compressed the veins to remain undisturbed for forty-eight hours. It has since been suggested that they might be removed at an earlier period. As far as any fear of hæmorrhage is concerned, this might certainly be done; but, on the other hand, there might be a danger of the circulation through the veins being restored before their divided extremities were consolidated. In the severer cases in which the scrotum has become unnaturally pendulous, it is advisable to remove more skin than at first might appear necessary, so that that which is left may act the part of a suspensory bandage.

Savile-row, W.

[1] This operation has lately been revived in Paris.

WHAT IS THE EXPLANATION OF ACQUIRED IMMUNITY FROM INFECTIOUS DISEASES?

By GEORGE M. STERNBERG, M.D.,
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(Concluded from p. 657.)

THAT full justice may be done to the "antidote theory," I quote fully from the latest authority who has written in its favour. Klein says: "There is another theory commonly spoken of as the 'antidote theory' (Klebs). According to this, the organisms growing and multiplying in the body during a first attack produce, directly or indirectly, some substance which acts as a sort of poison against a second immigration of the same organism. I am inclined to think that this theory is in harmony with the facts. There is nothing known from the observations before us which would negative the possibility of the correctness of this theory; nay, I would almost say all our knowledge of the life of the micro-organisms points to the conclusion that the different species are associated with different kinds of chemical processes, and that as a result of the activity we find different chemical substances produced.[1] The different fermentations connected with the different species of fungi afford striking illustrations of this view. According to this theory we can well understand that, just as in the case of an animal, say a pig insusceptible to anthrax, the insusceptibility being due to

[1] This is beyond dispute.—G. M. S.

the presence in the blood and tissues of a particular chemical substance inimical to the growth of the bacillus anthracis—so also in the case of a sheep or ox that has once passed through anthrax—there is now present in the blood and tissues a chemical substance inimical to the growth and multiplication of the bacillus anthracis whereby these animals become possessed of immunity against a second attack of anthrax. Whether this chemical substance has been elaborated directly by the bacilli, or whether it is a result of the chemical processes induced in the body by the bacilli during the first illness, matters not at all; it is only necessary to assume that the blood and tissues of the living animal contain this chemical substance. Some observers (Grawitz, &c.) are not satisfied with this theory, but assume, &c.[3] ..... On the whole, then, we may take it as highly probable that, owing to the presence in the normal blood and tissues of a living animal of a chemical substance inimical to the growth of a particular micro-organism, this animal is insusceptible to the disease dependent on the growth and multiplication of this micro-organism; and, further, that in those infectious maladies in which one attack gives immunity against a second attack of the same kind, one attack produces a chemical substance in the blood and tissues which acts inimically to a new immigration of the same organism; hence the animal becomes insusceptible to a new attack, or is 'protected.' This is not the case with all infectious maladies, for, as is well known, in a good many instances, a single attack does not protect against a second; and, as is also well known, a first attack may protect only for a limited period, or for a period greatly differing in different individuals. All this would be explained by our theory in the same way as it is explained by the other theories—viz., when one attack does not protect, no inhibitory chemical substance has been produced; while in those diseases in which one attack does protect only for a limited period, the necessary inhibitory substance has only lasted for a limited period, and so on."[2]

It is unnecessary to point out that Klein simply states and reiterates his own opinion in all that he says with reference to the theory which he favours, and that no experimental evidence is adduced in support of this opinion, nor, I may say, any arguments worthy of consideration; yet it would seem that, as in the case of the first hypothesis, a very simple experiment should decide whether this view is tenable. Fortunately, the experimental evidence which shows that it is untenable is at hand, and has been furnished in part by Klein himself.

It is difficult to understand the kind of reasoning which excludes Pasteur's hypothesis upon the ground that the anthrax bacillus multiplies freely in the blood of an immune animal, or in an infusion of the flesh of an animal dead of anthrax, but which supposes that a chemical poison present in the tissues prevents the development of the bacillus in the protected animal. What, then, has become of this poison when the blood of such an immune animal is drawn from its veins into a test-tube, or in the infusion made from the flesh of a recent victim of anthrax? We might possibly admit that the hypothetical chemical substance which remains for years in the blood and tissues of an immune animal, notwithstanding the elaborate provision made by nature for the excretion of useless or injurious products, is dissipated by boiling in the infusion made from the flesh of the animal; but this assumption will not apply to blood freshly drawn from its veins, which also furnishes an admirable culture-medium for the anthrax bacillus. But even this possibility has been disproved by Pasteur, who has given the *coup de grâce* to the antidote hypothesis by the following experiment. He says, "Is this the only possible explanation of the phenomenon?" referring to the exhaustion theory. "No, we may admit the possibility that the development of the microbe, in place of removing or destroying certain matters in the bodies of the fowls, adds, on the contrary, something which is an obstacle to the future development of this microbe. The history of the life of inferior beings authorises such a supposition. The excretions resulting from vital processes may arrest vital processes of the same nature. In certain fermentations we see antiseptic products make their appearance during, and as a result of, the fermentation, which put an end to the active life of the ferments, and arrest the fermentations long before they are completed. In the cultivation of our microbe products may have been formed the presence of which possibly may explain the protection following inoculation. Our artificial cultures permit us to test the truth of this hypothesis. Let us prepare an artificial culture of the microbe, and after having evaporated it *in vacuo*, without heat, let us bring it back to its original volume by means of fresh chicken bouillon. If the extract contains a poison to the life of the microbe, and if this is the cause of its failure to multiply in the filtered liquid, the new liquid should remain sterile. Now this is not the case. We cannot, then, believe that during the life of the parasite certain substances are produced which are capable of arresting its ulterior development."[4]

If Pasteur's experiment, which relates to fowl cholera only, is not considered conclusive, let us consider the tax upon our credulity which this hypothesis involves. In the first place, the individual who has suffered attacks of several different infectious diseases—as for example, of small-pox, measles, scarlet fever, yellow fever, &c.—has stored up in his blood and tissues as many distinct chemical substances as there are diseases in the list, each of which was produced by the development of a specific microbe in his body. These poisons in no way harm the individual, and no one of them, or even the combined action of several, has any effect in preventing the development of other pathogenic microbes of the same class. How different this from the action of known antiseptics, which act in a similar manner, although not in all cases in equal amounts, in restricting the development of all micro-organisms, pathogenic or non-pathogenic, of the class to which known disease germs belong. And how improbable it is that certain substances exist capable of preventing the development of these low organisms in the animal body, which are not injurious to the higher and more sensitive organism, when all our laboratory experiments go to show that the most potent "germicides" and antiseptics are poisonous agents, which are capable of destroying animal life in a relatively smaller proportion than is required for the destruction of "germs." Moreover, we are to believe that these several poisons remain indefinitely in the ever-changing blood and tissues, and that normal physiological processes, by which waste products formed in the cell laboratories of the body are quickly removed from the circulation, are impotent for the excretion of these very peculiar poisons, although non-lethal doses of potent vegetable and mineral poisons are known to be removed from the body in a comparatively short time. We are also required to believe that during the development of a vaccine vesicle in an infant a poison is formed, inimical to the development of the small-pox germ, in such quantity as to afford it protection during the period of its growth and maturity, and perhaps during a long life. In short, the difficulties in the way of accepting this explanation seem to be quite equal to those involved in the "exhaustion theory," and we are obliged to look further for an explanation of the phenomena in question.

As already stated, the explanation which seems to the writer most satisfactory, and most in accordance with the facts, is that which has been denominated the "vital resistance theory." It is well known that living tissues resist the invasion of putrefactive organisms, while dead tissues quickly fall into putrefactive decomposition. So, too, blood within the vessels of a living animal does not behave like the same fluid in a test-tube, but in some way disposes of the bacteria of putrefaction when they are injected into the circulation instead of nourishing them and being decomposed by them. Perhaps the histological elements of the vital fluid which exhibit the greatest vital activity—namely, the leucocytes—may be directly concerned in removing from the circulation bacteria which are introduced experimentally on those pathogenic or harmless organisms which by accident find their way into the blood. However this may be, it is evident that the blood and tissues of a living animal resist putrefaction by virtue of their vitality, and we are justified in using the term "vital resistance" in explaining the immunity of certain animals (acquired), or of certain races (inherited) to the invasion of certain pathogenic micro-organisms belonging to the same class as that which includes the bacteria of putrefaction, although we may not be able to explain the *modus operandi* of this vital resistance or to define exactly what vitality is. We know, at least, that vital phenomena are exhibited by a special kind of matter called protoplasm, and that the living portion of the histological elements of the blood and

[2] Already quoted, see *ante*. [3] Op cit., p. 249. [4] Op. cit.

tissues is composed of the complex nitrogenous substance which has received this name. We know, too, that this living matter, although apparently the same in its gross chemical and physical structure wherever found, has the most varied vital characters, which have been transmitted to it by living matter of the same kind from which it is derived. The special vital characteristics of each bit of protoplasm, enclosed in a cell wall or otherwise, are manifested during its growth, and, as is well known, certain cells—as, for example, the fertilised ovum of a mammal—develop into most complex organic structures; while others, as in the case of a micrococcus or a yeast cell, simply produce other cells like themselves. Not only are the characters which distinguish one species of animal or plant from another transmitted in this way, but individual characteristics may be transmitted in like manner, especially those of a vital or physiological order—such as a feeble or robust nervous or digestive system, a tendency to long life or to premature decay, vital resistance to morbific influences, &c.

As examples of inherited physiological peculiarities of the order last mentioned, I may refer to the predisposition in some families to diseases of the nervous system—insanity, epilepsy, and the like,—to the vulnerability of others to tuberculous infection, to the small-pox poison &c., and to the very feeble vitality of many children born of parents whose vigour has been impaired by excesses or disease, and which causes them to fall victims to the first devitalising agent with which they come in contact. On the other hand, we have numerous examples of unusual individual or family resisting power to specific morbific agents, and this is still more marked in certain well-defined varieties or races of man and of the lower animals. Thus, the negro, as already mentioned, is less subject than the white man to severe forms of malarial fever and to yellow fever; the Algerian sheep has an exceptional immunity from anthrax; the fatal form of septicæmia in the mouse, which Koch has so well studied, affects only house mice, while field mice are not susceptible to it. But, in addition to these inherited differences in vital resistance to various morbific agents, it is well known to physicians that wide differences in susceptibility to the action of these agents result from influences which lower the individual standard of vitality, temporarily or permanently. Among the most prominent of these influences may be mentioned hæmorrhage, chronic wasting diseases, excessive fatigue, inanition, venereal or bacchanalian excesses, &c. This is shown in a striking manner during the epidemic prevalence of pestilential diseases, which find their victims especially among those whose vital resistance is "below par" from one of the causes above mentioned.

The absolute immunity which certain species of animals have against the infectious diseases of other species is probably due in great part to causes of a different order, and is to be attributed to constant (specific) differences in the chemical composition of the tissues and fluids, and to differences in the normal temperature of the body, &c., which constitute favourable or unfavourable conditions for the development of particular pathogenic organisms. But this is quite a different matter from the relative immunity which results from a single attack of one of the infectious diseases, which may in certain cases be overcome by unusually large doses of the disease poison, by exposure when the general health of the individual is at a low standard—deficient vital resistance of a temporary nature,—or by an unusual individual susceptibility—"idiosyncrasy." There can be no doubt, then, that differences in vital resisting power do exist which determine the development or otherwise of a first attack after exposure to infection in those diseases in which one attack is to a greater or less extent protective; but this does not explain the immunity which follows such an attack. This I believe to be due to an increased vital resistance to the specific disease poison—probably not to the germ, but to the chemical products evolved as a result of its vital activity, and which give it pathogenic power—resulting from a tolerance to this poison acquired during the attack, when it must be present in the system in considerable quantity.

We have numerous examples of acquired tolerance to the action of known toxic agents, and especially to those which act chiefly upon the nervous system—e.g., opium, tobacco, arsenic. And there is evidence that disease poisons produce the morbid phenomena which characterise the acute infectious diseases, in part at least, by their action upon the nervous system. The febrile phenomena, for example, are no doubt largely due to the action of some toxic agent upon the nervous system; and the chemical explanation of fever, which supposes that it corresponds with the rise in temperature observed in a liquid undergoing fermentation, is as crude as is the chemical explanation of immunity. Evidently, if the explanation is correct thus far, the vital resistance of which I speak is a property of the living matter or protoplasm of the body, and resides in the cellular elements of the tissues—nerve cells, gland cells, muscle cells, leucocytes, &c. Now, these cells are not fixtures like bricks in a house, but are constantly being replaced by other cells. Their progeny, which in their turn grow old, die, and give way to younger generations. It is therefore necessary to suppose, in order that this explanation may cover the fact of a continued immunity for many years, that the tolerance acquired during an attack by the cellular elements of the body is transmitted to their cellular progeny through successive generations. This supposition will not overtax the credulity of biologists and of physiologists, for they are familiar with the wonderful power which protoplasm has of transmitting its peculiar vital properties, inherited or acquired, to its offshoots.

The vegetable kingdom furnishes us excellent examples of the transmission of acquired properties through successive generations of cells. Cultivated varieties of fruits and flowers are propagated by slips, buds, or grafts. The cellular elements of each bud or graft are in this case the direct progeny of those in the first cutting, which was selected because of some peculiarity which it was desired to propagate. But if we plant the seed produced by such a bud or slip, we do not obtain the peculiarities of fruit, flower, or foliage which we had preserved by the first mentioned method. In like manner acquired immunity from infectious diseases and acquired physiological or structural peculiarities generally are not transmitted through the reproductive elements of an individual to his offspring, at least not to an extent at all comparable with the transmission of race or family peculiarities. How, then, are these race or family peculiarities established? Darwin has answered this question in a most satisfactory manner for plants and animals in a state of nature. There are congenital differences in the progeny of the same parents which give character to the individual and which are to a greater or less extent transmitted to his offspring. "The survival of the fittest" has a constant tendency to perpetuate advantageous peculiarities, and these are intensified in succeeding generations by the action of the same general law of natural selection. It is by the action of this law that we explain acquired race immunity, as, for example, the superior tolerance of the negro to the action of malaria. Living in an intensely malarious region, a race tolerance has been established for this poison by natural selection and the survival of the least susceptible individuals. In this case we cannot explain the superior tolerance to the malarial poison by supposing that acquired individual tolerance has been transmitted and has become a race character, for the malarial poison is peculiar in that one attack not only does not protect, but constitutes a predisposition to subsequent attacks. I am disposed to explain in a similar manner the marked difference in susceptibility to infectious forms of septicæmia, which is exhibited by carnivorous and herbivorous animals. The herbivora are especially susceptible to these septic germ diseases, which are propogated by inoculation and are known to us mainly by laboratory experiments. It is evident that in a state of nature they are little liable to accidental inoculation with septic material containing the various organisms associated with putrefactive decomposition, and consequently there has been no opportunity for the establishment of race immunity by the survival of the least susceptible. The carnivora, on the other hand, are frequently forced, in a state of nature, to feed upon putrefying animal bodies, and in their battles over such prey must constantly wound each other with teeth or claws smeared with material containing septic organisms. If wolves were as susceptible as rabbits to the forms of septicæmia referred to, it would appear that the species could not long escape destruction. But this is not the case, and I can scarcely doubt that their immunity is the result of the survival of the least susceptible through successive generations; or, in other words, is due to natural selection.

MR. LEWIS W. STEVENS, L.R.C.P. Ed., &c., has been appointed a Justice of the Peace for the district of Robertson, Cape of Good Hope.

ON SOME

SURGICAL ASPECTS OF RENAL TUBERCULOSIS.

BY REGINALD HARRISON, F.R.C.S.,
SURGEON TO THE LIVERPOOL ROYAL INFIRMARY.

TUBERCULAR disease of the urinary organs has recently received considerable attention, and the literature of the subject has been importantly added to by the French school of pathologists. In reviewing urinary tuberculosis it is impossible entirely to dissociate any one part of the system as belonging to the physician, it being now well recognised that certain morbid conditions feign well-marked surgical complaints, and give rise to consequences which are only amenable to surgical interference. The observations I am about to make have been led up to by cases presenting symptom indicating the necessity to explore for calculi or to practise cystotomy for their relief.

Tubercle of the kidney in its earliest form I have frequently found to be a cause of incontinence and urinary irritability in children; many children, especially males, who were suspected of stone, proved to have tubercular kidneys. It is not easy always to determine cases of this kind. In one instance recently under observation, where in addition to medical treatment, circumcision of an elongated prepuce had been performed, extensive renal tuberculosis with almost entire atrophy of one kidney was shown after death to have taken place. In assisting to make a diagnosis between what we may call medical and surgical incontinence, I have found the use of the thermometer extremely valuable in doubtful cases. If there are tubercles in the kidney, the temperature will generally show them, provided the observations are continued for some time, in addition to other indications which it is not my province to enter upon.

Of the various operations employed for the relief of urinary affections it would be difficult to mention one that had given better results generally than cystotomy; the least favourable cases, in my experience, have been those where this operation was undertaken for symptoms traceable to tuberculosis. Of these I might instance several. The following example was a particularly interesting and an instructive one of its kind.

Some years ago a small boy four years of age came under my care at the Royal Infirmary, at the request of Dr. Little, on the suspicion that he had a stone concealed somewhere in his urinary organs. He had many of the symptoms of this complaint, but though he had been sounded several times no calculus could be felt. He was the child of distinctly strumous parents, and was singularly bright and intelligent for his age. Twelve months previously he commenced to wet his bed at night and to suffer from urinary irritability in the daytime. Occasionally very small quantities of blood had been detected with the microscope in the urine, which was invariably acid and opaque. Within two months prior to his admission the urine had been charged with mucus and granular matter containing a few pus cells of a tenacious character, efforts to expel which from his bladder produced much spasm and suffering. To aid micturition, and at the same time with the view of mitigating his spasm, he acquired the habit, which at last became constant, of pulling at his penis. He seemed, as it were, to milk away the urine and what it contained from his bladder. It was under these circumstances he came into the infirmary, when it was found necessary to give him sedatives freely. The urine, always granular-looking and opaque, now and then contained something which seemed more like the white of an egg half boiled than anything else. He was sounded, under ether, but nothing abnormal could be detected by any form of physical examination that was employed. Towards evening he was generally noted to have a rise in temperature, and there was a distinct tendency towards hectic. To alleviate the constant pain and spasm of micturition a median cystotomy was performed, but with little benefit. The spasm and vesical tenesmus still continued almost unabated. In the course of a month the child died with renal symptoms and a gradual suppression of urine. Post-mortem examination showed nothing wrong with the bladder or the urethra. The ureters were dilated and the kidneys cystic and tubercular. Some of the cysts thus formed, communicating with the pelvis of the kidney, contained thick gummy-looking mucus similar to that which was observed in a more diluted form in the urine; the cyst walls seemed to be engaged in secreting this viscid matter, which obviously with some difficulty had found its way along with the urine down the ureters. This was the explanation of the dilated ureters, the bladder spasms, and the irritability which led to cystotomy being practised. Without such an explanation it was difficult to understand how the ureters could be dilated, and yet no stricture exist in the urethra.

This case has since served to illustrate, in connexion with others of the kind not very dissimilar in history, progress, and results, at least three points: (1) That urinary incontinence or irritability in young children may proceed from renal tuberculosis; (2) that though cystotomy gives relief by allowing escape of the viscid mucoid material the tubercular cysts in the kidneys furnish when it has reached the bladder by slowly trickling, or insinuating itself down the ureters, there might in other cases of this kind be more cogent reasons for opening and directly draining the cystic kidneys, with the view of preserving what remains sound in structure as well as of preventing the constant spasm or colic which is aroused by the products of the disorganised kidney forcing a way along the ureters; (3) that such a case serves to illustrate those extremely rare cases (of which but few specimens are known to exist) where stones in the bladder have been found, wrapped up as it were in fibrous or gelatinous envelopes.

It was only comparatively recently, until I had by the kindness of Mr. Bickersteth an opportunity of carefully preserving and examining a well-marked specimen of what these tubercular cysts in the kidneys are capable of pouring along the ureters into the bladder, that I felt it possible to explain the formation of semi-fibrous stones. The best specimen I know of is in the Liverpool Infirmary Museum, and has been there referred to by me on a previous occasion.[1] "In 1873 a boy was admitted into the Liverpool Royal Infirmary, under the late Mr. Long, suffering from symptoms of stone. The child was sounded carefully, but without any evidence of stone being afforded. Death occurred in the course of a few days. On making a post-mortem examination the kidneys were found in an advanced stage of tubercular disorganisation and cystic. The bladder was small, and in it lay a calculus made up of a urate of ammonia nucleus, the size of a damson-stone, surrounded by a thick layer of soft material, consisting of mucus, fibrin, and a little gritty matter, probably phosphatic. The outer covering could be cut or torn easily, and after it had been in spirit it presented on section a laminated appearance, like the fibrinous layers found in an aneurysm. On striking the mass with a metal instrument no ring was produced; hence the impossibility of determining its existence with the sound during life." Mr. Bickersteth records a similar example.[2]

The possibility that in a strumous subject a small stone in the bladder may, as it were, be wrapped up in a fibrous sort of coat furnished by a tubercular kidney must not be lost sight of in the investigation of obscure cases of vesical stone, whether or not the explanation I have offered as to their formation be a satisfactory one.

In the diagnosis of urinary tuberculosis in the adult male, in whom this disease is frequently found between the ages of twenty and forty, the careful examination of the testes and prostate with the finger often furnishes valuable evidence as to the probability of tubercle existing in some other portion of the genito-urinary apparatus which is beyond reach. When such evidence coexists with positive signs of functional urinary irritation in some form or other, further evidence as to the cause of the symptoms is hardly requisite. In all cases where there are grounds for suspicion the testes and prostate should be carefully examined. So far as the testes are concerned, there is nothing to be said in reference to their mode of examination. With the prostate it may be observed that our generally recognised method of examining this gland with the patient on his back or side is a very imperfect one, for whatever purpose, diagnostic or otherwise, it is required. To examine the prostate thoroughly and with the least amount of discomfort both to the patient and the surgeon, the former should be placed with his abdomen

[1] The Surgical Disorders of the Urinary Organs, second edition, p. 261 (with plate of stone).
[2] Observations on Lithotomy, Liverpool Medical and Surgical Reports, vol. i., 1867.

over the end of a sofa or on a pillow over the side of a bed, with the legs slightly apart, so that the surgeon may introduce the finger into the rectum with its palmar surface downwards, the patient's abdomen being at the same time pressed backwards and towards the pelvic outlet by the weight of the body on the bed. In this way the most accurate information can be obtained by the finger respecting the size, consistence, and relations of the gland. In urinary tuberculosis in the adult male small rounded bodies like shots, sometimes softened in their centres, can be felt either singly or scattered throughout the gland. This I have often demonstrated in the wards of the Royal Infirmary in connexion with the diagnosis of urinary tuberculosis. In young male children, or in adults where the prostate is immature, and it is difficult to make out accurately with the finger, even under an anæsthetic, the consistence and boundaries of the glands, I generally examine with a slightly flattened smooth staff in the bladder; this furnishes a central point of resistance which renders it easy to detect any structural change by the finger, such as a tubercular deposit. I attach much importance to the examination of the prostate in all cases of suspected tubercular disease of the urinary organs.

Liverpool.

A CONTRIBUTION TO THE

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.[1]

BY GEORGE OLIVER, M.D. LOND.

No. I.—TEN TESTS FOR THE BILE SALTS, WITH DEMONSTRATION.

THE study of the urinary aspect of diseases of the liver is so large, and withal so full of clinical interest, that he who has mastered it merely in outline, cannot well do it justice without devoting a series of papers to the elucidation of it. I, therefore, cannot hope to do more on this occasion and at our next meeting than to provide a sketch of one department—namely, the clinical significance of the colourless central components of the bile in the urine. In this communication I will confine myself to a consideration of the tests which enable us to detect the presence of the biliary salts in the urine, leaving over for the next meeting an outline of the physiological and clinical aspects of the subject.

The urinary derivatives of the biliary salts.—The salts of the bile acids, as they exist in the bile, are taurocholate and glycocholate of sodium, the former greatly predominating. These biliary constituents are not altogether eliminated by the kidneys in the chemical forms in which they are secreted by the liver. When they reach the intestines, they are split up into taurin and glycin on the one hand, and cholate of sodium on the other. The cholate is mainly reabsorbed by the bowels, a small portion only being excreted in the fæces; while the rest is returned to the liver by the portal blood, and is, at least, in part, eventually discharged in the urine. The bile salts, as they appear in the urine, therefore, in all probability, consist of the liver-secreted salts—taurocholate and glycocholate, and of the derived salt—cholate.

The clinical tests hitherto employed for detecting bile salts in the urine are unsatisfactory.—All the works on physiology and on urine refer to Pettenkofer's test—sulphuric acid and cane sugar—or some modification of it, as the only clinical means by which bile acids are to be detected in the urine. However satisfactory this test may have proved itself in the hands of chemists, who have applied it to solutions of the bile acids extracted from the urine, it cannot, I am fully persuaded, claim an analogous position as a mode of direct testing, such as the practitioner requires, for my experience of it as a clinical test has been most disappointing. In delicacy it falls very far short of the clinical needs of the practitioner, and in reacting with other substances besides the bile derivatives—e.g., albumen[2] and other organic bodies—it is apt to mislead the observer. I can, therefore, endorse Dr. Tyson's remarks on this point: "From a perusal of almost all the text-books on Physiology, and even of numerous manuals on the examination of the urine, the student is led to suppose that the detection of bile acids, if present in the urine, by means of what is called Pettenkofer's test, is one of the easiest possible. On the other hand, nothing is farther from the truth, and the fact is that *such detection by the direct application of the elements of Pettenkofer's test to urine, or any other animal fluid, is practically impossible, even if the bile acids are present in considerable amount.* Nor have any of the modifications of Pettenkofer's test, recently announced as clinically available, proved such in my hands, even where the elements of bile have been added to the urine, except where inspissated ox-bile has been used." The italics are Dr. Tyson's.[3] I am disposed to conclude from my observations that Pettenkofer's test does not react directly with the liver-secreted salts, taurocholate and glycocholate, but only so with the derived salt, cholate. Hence, it does not indicate the presence of the biliary salts in fresh ox-bile until it has had time to decompose them, and thus to liberate cholic acid; but it reacts at once, and very decisively, after the bile has been boiled for several hours with caustic potash, a procedure that breaks up the liver-secreted salts, and furnishes the derivate, cholate. This is doubtless the reason why Pettenkofer's test reacts with inspissated, though it fails to do so with fresh bile, for the taurocholate is readily decomposed by boiling only, and the extract is an evaporation product; and, furthermore, why it rarely affords at once a distinctive reaction in jaundiced urines, which are highly charged with liver-secreted salts.[4] The test for peptones, recently introduced by Dr. Randolph, of Philadelphia,[5] may likewise be employed for the direct testing of bile salts, and for this purpose it is delicate; but is unfortunately open to the objection that it reacts equally well with the merest trace of peptone—a constituent often present in small quantity in the urine of hepatic cases, and, moreover, generally in such traces as to be detected with difficulty, and, therefore, cannot always be definitely excluded.

The proposed test is founded on a physiological reaction.—The test I employ for the direct detection of the bile salts in the urine is a purely physiological one, for it is based on a reaction which belongs to the bile itself as it flows into the intestines. When the products of gastric digestion—peptone and parapeptone—which leave the stomach in a state of acid solution, meet with the bile, they are precipitated, as a tenacious layer, all over the villi of the lining membrane of the duodenum.

A solution of the bile salts precipitates acidulated albuminous urine or urine charged with peptone.—The same physiological fact is illustrated outside the body, by acidulating—by means of citric or acetic acid—albuminous urine,[6] or urine charged with peptone, and treating it with a solution of the bile salts, or by ox-bile freed from pigment, mucin, and fat, when the proteid is precipitated. I take a sample of albuminous urine, acidulate it with a citric test paper, and add a few drops of a solution of the biliary salts, and a voluminous white precipitate is observed, just as if I had thrown down the albumen by ferrocyanide of potassium, or by potassio-mercuric iodide. But though like other precipitates of albumen in failing to dissolve when heated, when the bile salts have not been added in excess, it differs from them in this—in vanishing on the addition of acetic acid. This precipitation of albuminous matter from an acid solution is induced not only by the bile salts, taurocholate, and glycocholate, but also by their derivative, cholate of sodium.[7]

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[1] Read before the Leeds and West Riding Medico-Chirurgical Society, April 10th, 1885.

[2] I have sometimes been led to believe that the presence of albumen retards or prevents the reaction with bile acids.

[3] Practical Examination of Urine, p. 91.

[4] Just lately I met with an instructive instance of this fact in a specimen of colourless bile extracted by aspiration from the gall-bladder of a jaundiced patient. I first of all determined the presence of a fairly large quantity of bile salts. Pettenkofer's test, however, afforded no reaction within several hours; but, after boiling a portion of the colourless fluid with liquor potassæ, the test afforded the characteristic colour change in a few minutes.

[5] THE LANCET, June 26th, 1884.

[6] Physiological writers assert that the bile only precipitates the proteid from the acid solution that enters the duodenum when in the form of peptone and parapeptone, and not when in that of albumen—as when albumen is dissolved by an acid. If this be so in the duodenum, it certainly is not so in the urine. When a solution of bile salts is added to an acidified albuminous urine, the proteid is precipitated, just as in the case of acidulated normal urine artificially charged with peptone.

[7] Observation shows there are three conditions that prevent the reaction between the bile salts and an acidified solution of albumen

Why not employ an acidulated solution of a proteid in order to detect the presence of bile salts, or the derivative of them, in the urine?—Hence, as this reaction is a thoroughgoing and decisive one, why not utilise it as a means of discovering the colourless bile derivatives that may overflow into the urine? For if these biliary constituents are present, in however small a quantity, they will surely precipitate an acidified solution of a proteid—resembling, in fact, the chyme—when brought into contact with the urine. Experiment and clinical observation have proved such to be the fact.

Acidification is a necessary condition of the reaction.—I add a solution of the bile salts to albuminous urine, and the mixture is seen to be clear,[8] but on letting fall a few drops of acetic acid into it, the albumen at once falls out of solution, and on the further addition of the acid the precipitate dissolves. Then, again, I take equal parts of an albuminous and of a jaundiced urine, and the transparency of the mixed urines is unaffected; but on dropping in a citric test-paper, a cloud of precipitated albumen collects below, with, however, this peculiarity—the coagulated albumen forms a zone just above the bottom of the tube, where, indeed, the urine remains clear, because the large amount of acid concentrated at this part prevents the precipitate from appearing there. In this case the bile salts present in the jaundiced urine precipitate the albumen, as in the preceding observation, the citric acid merely performing the same duty as when employed in the mercuric or ferrocyanic test for albumen. About twelve months ago I encountered a fact in urine-testing which at that time I could not explain, nor could I derive light either from books or from my friends: the same patient, on different days, provided me with various samples of albuminous urine, which were divisible by the action of citric or acetic acid into two classes—one set precipitating freely with the acid, the precipitate insoluble with heat, and the filtrate albumen-free; and the other set unaffected by the vegetable acid. I carbolised a good example of each kind, and set it aside, believing that the explanation would be forthcoming some day or other. On now re-examining these specimens, I find the one that precipitates albumen by the organic acid contains a large quantity of bile salts; while the other has none—or merely a little more than the trace that belongs to normal urine.[9] The precipitant of the albumen was therefore in this case also the bile salts, which remained inoperative until the vegetable acid was added.

I have lately met with several urines of normal reaction, containing albumen and bile salts, in which the proteid was precipitated by merely adding an organic acid. I show you two examples. This dark urine is a jaundiced urine containing albumen; you see how freely the proteid falls on merely dropping into it acetic acid. And this is a specimen containing an excess of bile salts, but no biliary pigment, along with albumen; and you will note in the course of a few minutes that a citric test-paper produces the characteristic zone-like precipitate, leaving the lowest part quite clear. When the precipitate induced by the organic acid is collected, washed on the filter, and dissolved in an acid (such as acetic or hydrochloric), the albumen is freely precipitated afresh by nitric acid, by the picric acid solution, and by other precipitants of albumen, so that it is albumen and nothing but albumen.

Acidified albuminous urine is a test for bile salts in the urine.—I run this diluted albuminous urine, acidified by acetic acid, over a jaundiced urine, and along the plane of contact of the urines a sharply defined white band or zone of precipitated albumen will be noted, a reaction which is indeed very striking and decisive.

(To be continued.)

or peptone—namely, (*a*) an insufficiency of acid, (*b*) an excess of acid, and (*c*) the proteid present in large quantity. The precipitate with an acidified solution of albumen or peptone, or with acidified urine containing either form of proteid, dissolves on adding acetic acid, or a citric acid test-paper, to sixty minims where the bile salts are present below a certain proportion. These facts appear to me to be interesting in connexion with the temporary albuminuria or peptonuria which is confined to the digestive periods, and with the increased elimination of albumen in chronic renal disease which takes place after meals. May not a sub-acid or a per-acid chyme, or an excess of the ingested proteid, when the bile flow is imperfect, prevent the biliary salts from precipitating—or, rather, from completely precipitating as in health—the albuminoid materials which flow into the duodenum, and thus permit the premature absorption of them?

[8] When the bile salt solution is run upon an albuminous urine, or more especially upon a normal urine charged with peptone, but in neither case acidulated, a delicate zone of precipitated proteid appears, which, however, vanishes on mixing up the solution with the subjacent urine; but the opacity is restored by a citric test-paper, or by a drop of acetic acid.

[9] This patient also on several occasions furnished me with specimens containing peptones in the place of most of the albumen. One of these I also carbolised. On retesting it, I find the peptones still present, with a trace of albumen; and on running over it a diluted solution of acetic acid, there instantly appears a beautiful thick pearly-white zone. Bile salts are present in large quantity.

REMARKS ON

NINE CASES OF DEATH BY HANGING

(SIX EXECUTIONS AND THREE SUICIDES).

BY R. J. KINKEAD, M.D. DUB.,

LECTURER IN MEDICAL JURISPRUDENCE, QUEEN'S COLLEGE, GALWAY.

(*Concluded from p. 658.*)

As far as instantaneous death and freedom from suffering are concerned, hanging by means of the long drop, with the knot of the rope under the chin, seems effective and humane; but it is not unaccompanied with the danger of decapitation. This actually occurred some years ago in Dublin in the case, I think, of Kilkenny, and was then attributed to the use of an old rope which had lost its elasticity. The ropes used by Marwood were also old and had lost their elasticity, but they were thick, I should say an inch to an inch and a quarter in diameter. That decapitation did not occur was probably due to the thickness of the rope, and more especially to Marwood's long practice, enabling him to judge pretty fairly from a look at the criminal, what length of rope should be given. Yet in one of the cases I witnessed decapitation was almost complete, and it seems marvellous that the small portion of skin by which the head was attached to the body did not give way during the hour the body was left suspended. In another most of the tissues inside the neck were torn through and only the skin left intact, so that there must have been in many cases very narrow escapes from decapitation.

I do not enter on the question or express any opinion as to whether it is expedient or inexpedient, right or wrong, that capital punishment should exist. But surely so long as the penalty of death is exacted it is the bounden duty of the State to see the provision made for executions shall be as perfect as possible, so that they may be rapid, painless, and free from the possibility of mistake. The penalty of death is the heaviest punishment the law can inflict; it is a very terrible one, not alone to the criminal, but to those whose duty compels them to witness it. That any bungling should take place or any delay occur through the inexperience or awkwardness of the executioner, or that through his avarice he should be able to dispense with needful assistance, would be to add great cruelty to the punishment; yet under the present system this is not only likely to occur, but has actually happened. There is no such thing as a public executioner for the kingdom. The sheriffs of Middlesex and London appoint one, but his appointment confers no right outside their jurisdiction. The sheriffs of other counties are not obliged to employ him, and there is no fixed scale of pay. It is simply a matter of bargaining, and a sheriff can employ anyone willing to undertake the duty, and pay whatever sum may be agreed upon. Strange as it may seem, there is no lack of competitors for the loathsome office, and there is no guarantee that a totally unfit and inexperienced person may not be selected, and wretched criminals' sufferings prolonged. It seems incredible an execution should be a matter of bargaining, to be touted for like any other trade, yet so it is. I have myself seen a letter from Marwood asking for a certificate as it would be useful to him in his business. So long as capital punishment exists there ought to be a public executioner, with properly trained assistants, a fixed scale of pay, and the sheriffs ought to be obliged to employ them and no others. Furthermore, when more than one person is to be hanged at the same time, it ought to be rendered imperative that the executioner should have a sufficient number of assistants to avoid delay. The conclusions arrived at by Dr. Haughton, in a paper read before the Surgical Society of Dublin, are in the main correct, except that the fall of ten to fourteen feet is too long. In no case I have seen was the drop more than eight or nine feet, yet in one the head was almost severed from the body.

The three cases of suicidal hanging I have to record

present some features of interest. In none of them were there any traces of insanity, nor was there anything in their manner or conduct which could have led one to suppose that suicide would be attempted. In only one could any reason for the act be traced.

E. S——, aged thirty-six, was last seen alive at about 1 P.M., when his dinner was served. At 2 P.M. he was found hanging in his cell from the gas-pipe; his feet were about six inches from the floor. The warder who found him cut the body down at once. When I saw him at 2.25 he was quite dead; the body was warm; rigor mortis had not set in. The eyes were half open, pupils moderately dilated. The face was pale and calm. The tongue was not protruded or pushed up against the roof of the mouth, nor was it dark in colour. The fingers were not clenched; surface of body pale; no evacuation of fæces or semen. He had drunk all his soup and eaten part of his bread. He had used his neckerchief as a means of suspension.

T. K——, a strongly built, robust man, aged thirty-seven, was found dead at 6 A.M. hanging by his necktie from his hammock hook. He had been seen last alive at 10 P.M. on the previous evening. When found the body was cold, and he had evidently been dead some time. The body swung clear of the floor, and fæces, evidently passed in the death-struggle, were found on the floor immediately under the body. There was no trace of seminal emission. When I saw the body rigor mortis had commenced in neck and upper extremities. The face was swollen and livid. The right eye closed, the left half open and prominent. The tongue, black, swollen, and protruded, was pressed against the upper jaw; the limbs were livid; the surface of the body was congested and the hands clenched.

T. B——, a lad aged eighteen, had been in prison only a couple of days. He ate his dinner, which was served at 1 P.M. At about 2.10 P.M., after the dinner tins had been removed, he rang his bell and was let out to the closet, where he remained about three minutes and returned to his cell. Ten minutes later the warder, on looking through the trap in the cell door, saw him standing in a curious position against the wall under the window of his cell, which was immediately opposite the door. He at once went into the cell, and found him partially suspended by one of his braces to the chain of his window. He immediately loosened the brace, took the body down and sent for assistance; when found the boy appeared to be quite dead. Professor Lynham, M.D., who lived close to the prison, was sent for at once, and on my arrival at 3 P.M. I found him endeavouring to restore animation, and making use of artificial respiration. All our efforts, however, failed. The face was pale and calm. No prominence of eyes or protrusion or alteration in colour of the tongue, nor escape of saliva from the mouth. Neither was the surface of the body congested, nor were the hands clenched. What was remarkable was the rapidity with which rigor mortis set in: the boy was last seen alive at about 2.20; the body was found partially suspended at 2.30, yet when I saw it at 3 P.M. rigor mortis had commenced in the neck. As, during efforts to restore respiration, the arms were brought down to the sides, the head and neck raised up, and when the arms were extended above the head, the upper portion of the trunk arched slightly backwards—phenomena which rapidly became more marked. The method adopted for self-destruction was peculiar. The cells are heated by hot water, the pipe passing through the cell under the window; the top of the pipe is about six inches from the floor. The window opens on a swivel in the middle, and a slight metal chain attached by one end to the top and the other end to the bottom enabled the occupant of the cell to open or close the window at pleasure. The loop of the chain hung down to the edge of the embrasure of the window, which would be about the level of the boy's neck when standing on the hot-water pipe. The prisoner's braces were made of frieze and lined with coarse calico. The prisoner had stood on the hot-water pipe with his back to wall, passed his brace round his neck and through the loop of the chain of the window; he had not tied it in a hard knot or, I may say, in any knot at all, the ends making merely the first folds of a knot. Whether he then stepped down off the pipe or slipped off will never be known, but when found he was standing on the floor, his back resting against the wall and the brace tightly round his throat. The surfaces of the brace being rough, and the sides of the loop of the chain coming close together under the strain, had prevented the folded ends of the brace yielding, and consequently it held as firmly as a complete knot could have done. Whether the prisoner really intended to commit suicide or only to feign to do so, whether he slipped off the pipe, or that, thinking the fastening would yield sufficiently to allow him to breathe, he stepped off, are conjectures. Taking the entire circumstances into consideration, I believe the intention was to make a feigned attempt, knowing that the result would be his being placed in association in charge of two other prisoners. Experience has shown that when suicide is really attempted care is taken to make secure knots. I am not aware of any case on record in which the ligature round the neck was not tied.

The scientific value of these cases is sadly deficient from the want of post-mortem examinations. The results of suicidal hanging cannot be compared with those of executions, the mode of death being so entirely different; the laceration of the spinal cord, and rupture of the trachea and bloodvessels, preventing engorgement of the lungs and right side of the heart. The appearance, therefore, of criminals after execution cannot be taken as typical of hanging in general. In two of the suicidal cases the appearance was totally dissimilar, although in both the bodies were perfectly suspended. In one, suspension could have only lasted an hour at the outside, probably less; in this case the face was pale. In the other the length of time the body was hanging was uncertain; from the position and size of the hook, and the time taken in making, and the intricacies of, the knots made on the handkerchief, by which it was attached to the hook, it was evident that it was done after daylight had appeared—that is, some time after 2 A.M. The appearance of rigor mortis and the reduction of the temperature of the body led to the presumption that it had been hanging for some hours. The former alone would have been no indication of time; as in the third case, rigor mortis was apparent half an hour after the man had been seen alive. The appearance of the face and body in this case supports the statement that the face is "more often congested, especially in those who have been long suspended."

The third case has more interest in a medico-legal aspect. It confirms the fact, already recorded, that death from hanging takes place very rapidly, even with the feet or other portions of the body resting on the ground. It shows how rapidly rigor mortis may set in and how carefully the mode of hanging ought to be examined, and the means used tested, in all cases where a body is found suspended. Although it is true that in hanging (excluding executions) the presumption is in favour of suicide, yet it may be homicidal, and further, death having been otherwise caused, the body may be suspended after death. If a body had been thus found in any other place with the ligature so incompletely fastened, the presumption would have been in favour of homicide; for *a priori* it would have appeared in the highest degree improbable that a suicide would have been so careless in the arrangement of the noose, or, if he had, it would have seemed unlikely that so incomplete a fastening—only the first fold of a knot passed through the loop—could either have supported the weight of the body, or, without yielding, have borne a strain sufficient to cause death. It would rather have appeared that after death the body had been placed in that position, and that time had failed to complete the knot. Not only was such a supposition entirely out of the question, but I satisfied myself by actual experiment that, with the material used, the arrangement was effectual; for, on placing the brace in the loop of the chain, folded as it was found, and applying a downward strain to the noose thus formed, the sides of the chain came tightly together, which, with the roughness of the material, prevented any yielding and enabled it to bear a weight equal to that of the body. In all three cases the mark of the ligature was distinctly visible on the neck.

Since writing the foregoing two more executions have taken place. In both Berry was the executioner, and his method differs from Marwood's. Although both were single executions, he had the aid of an assistant, who strapped the legs while the executioner adjusted the noose, thus materially shortening the time. Instead of leaving the rope hanging its full length, so that when the noose was adjusted it looped down behind, he coiled the slack of it up under the beam, and fastened the coil with a piece of thread, thus avoiding all possibility of the rope catching under the elbow or foreleg in any way. He also placed the loop under the left ear. In neither case did the coroner consider a post-mortem examination necessary. From an external exami-

nation I judged that the vertebræ were separated, but in neither was the separation so marked or distinct as in those executed by Marwood. The faces were deeply congested, the hands were not clenched, and rigor mortis was well marked in both when taken down one hour exactly after the drop fell. My experience leads me to believe that in addition to a proper length of drop, fracture or dislocation of the spinal column and instantaneous death are most likely to be attained by the loop being placed under the chin.

Galway.

THE TREATMENT OF

ACUTE EARACHE BY THE INJECTION OF GLYCERINUM ACIDI CARBOLICI.[1]

By H. BENDELACK HEWETSON,

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Of late years the use of various forms in solution of carbolic acid has been so universally prevalent in modern antiseptic surgery that many, as it were, hidden virtues have, by constant familiarity with the drug, become patent, as well as that the cautionary mirages which naturally always arise on the introduction of a new drug have been paled into insignificance before the light of experience. The anæsthetic properties of the drug are now much more fully understood and appreciated than they were some few years ago, although a solution of carbolic acid, short of being caustic, was well known to have local anæsthetic as well as antiseptic properties. Any surgeon who has worked for a long time at an operation such as ovariotomy, for instance, must remember his lack of tactile power when he went to his next meal. I myself have frequently dropped my glass, my tactile corpuscles having become temporarily and locally anæsthetised from constant immersion in the solution of carbolic acid which is used for instruments. In nearly all operations (the removal of a breast, for instance) the glycerinum acidi carbolici is applied to the wound to stop the after-smarting, and this it does effectually. Then arose the application of the glycerinum acidi carbolici to the exposed nerve in toothache. The relief is absolutely instantaneous if the tooth-pulp is exposed, the patient passing from the severest pain to that of a state of bliss, which all testify to who have experienced relief from toothache. I must here, in passing, just allude to the fact that when earache is due to toothache, which it is in a large number of cases, this application of the glycerine and carbolic acid cures the earache by relieving the toothache.

It is now about seven years since a patient came to me saying that his little boy of five years of age had, within the previous three hours, developed acute earache, and that his temperature was above 100° F. The temperature had been taken by his mother, and was rising. The thought occurred to me, why not inject glycerine and carbolic acid into the ears, as it was evidently a case of inflammation of the middle ear, which would eventually end in perforation and relief, as it had in this child done several times before. I injected this solution of carbolic acid and glycerine, and, to my great delight, it acted as in toothache, almost instantly relieving the acute pain. This was done at three in the afternoon, and the next morning the boy was perfectly well, and heard nearly naturally, though not quite, as he still had a cold. The tympanum never became perforated, as it had done on previous occasions, and the temperature rapidly fell to normal. This is a typical case, and I may say that I have repeated it times without number in the same way, both in children and adults—that is, in earache and in catarrhal otitis. In all cases of this kind, at whatever stage it is applied for earache, it invariably stops the pain; and I feel sure that in many cases, even when perforation seemed imminent, the relief from the pain diminished the tension, and by its strong antiphlogistic as well as anæsthetic power perforation has been avoided. If an earache returns, as it does sometimes, where a perforation has taken place and has again closed, the application of the glycerine and carbolic acid gives great relief, and stops the tendency to recurrence to the same thing in some cases, but not in all, although it always relieves pain, and thus constitutional disturbance. In cases of earache from periostitis, either in cases of chronic otorrhœa or in uncomplicated cases of inflammation of the external auditory meatus, the relief to the pain is not so rapid; but if the carbolic acid and glycerine be allowed to remain in the meatus, then relief from pain is obtained in from ten to thirty minutes. It occasionally returns in these cases, when the solution can be reapplied with renewed benefit. By this means I am convinced, by a large experience extending over some years, that if the treatment is used early, perforation of the tympanum can be stayed in many cases. Of course the tendency to catarrh, or other causes which make a patient prone to otitis, is not the object of this paper, nor also is the after-treatment of such cases where the otitis is got rid of. I am dealing only and solely with earache, and the circumstances immediately surrounding it. I may say that I am not only relating my own experience of the treatment; but, in consequence of a paper which I read before the Yorkshire Medical Society, it has been quite generally used by medical men in the north of England who have reported their experience to me. There is one way in which it may fail to relieve pain at once, and that is in case it is poured too quickly into the external auditory meatus, when the patient has his head aside, with the lobe of the ear in its natural position. In this way the air cannot escape sufficiently freely, and a bubble of air prevents the fluid from reaching the bottom of the meatus. The proper way is to draw the lobe of the ear forcibly upwards and backwards, as in syringing the ear, to straighten the entrance to the meatus, and then allow the fluid to trickle gently down one side, whilst the air escapes up the opposite side. In cases where the meatus is very swollen at its orifice, I have injected the solution up a fine elastic catheter well covered with vaseline to promote its easy passage, and in this way I have relieved earache when it could not have been alleviated except by a hypodermic injection of morphia or such means.

I have taken great pains to arrive at the best strength of carbolic acid and glycerine to attain these results, and I find that weaker solutions do not cure the pain so rapidly or effectually. If weaker solutions are used, they will be found to fail in attaining the same results, and of course stronger solutions would soon become caustic. The glycerinum acidi carbolici in this form is not strong enough to be caustic, and can be applied in severe earache when a perforation exists quite harmlessly.

I have a further suggestion to make as to the applicability of this treatment; but I am only able to support my suggestion by a few successful cases which have come under my own observation. I refer to this application as a means of checking the disastrous otitis in scarlet fever, as well as to relieve the earache in these cases. I am very hopeful on this point; for in one or two instances where I had an opportunity of applying the glycerine and carbolic acid, when a patient first complained of earache in scarlet fever, and the membrana tympani had begun to redden, the relief to pain was immediate, and no perforation took place.

I make the suggestion, and hope all who have the opportunity will try it, since one important (very important) element, I take it, to anyone, much more to a patient in high fever, is the immediate relief from local pain, which must act as a beneficent element in assisting the patient through his illness.

[1] A paper read before the meeting of the International Otological Congress, Basle, Switzerland, September, 1884.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of the directors of this Society was held at 53, Berners Street, on April 8th, Mr. Tegart, V.P., in the chair. Six new members were elected, and the death of one reported. Applications for grants were read from sixty-three widows, nine orphans, and three recipients of grants from the Copeland Fund, and a sum of £1349 was recommended to be distributed among them at the next quarterly court. A fresh application for grants was made by a widow on behalf of herself and daughter, and grants were made them. Mr. Henry Lee and Mr. Cooper Forster were nominated for election as vice-presidents at the annual general meeting, in the place of Mr. Cæsar Hawkins and Sir Erasmus Wilson, both deceased, and the following gentlemen were named as directors to fill the vacancies arising from the retirement of the six senior, and from the death and resignation of others—viz., Mr. Hogg, Dr. Burker, Dr. F. Roberts, Dr. Broadbent, Dr. Ogle, Dr. Duke, Mr. Bennett, Mr. J. S. Turner, Mr. Stokes, and Mr. Latham. The annual general meeting was fixed to be held on May 20th at 5 p.m.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas at morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

A CASE OF LITHOTRITY; REMARKS.

(Under the care of Mr. CLUTTON.)

THE following case of lithotrity with prolonged manipulation is a good example of the method of procedure introduced by Bigelow in the year 1878, which he prefers calling litholapaxy, but which retains the name of lithotrity in this country. In this case the amount of débris produced was such as to render its removal at one sitting impossible, without exposing the patient to unnecessary risk, the remainder being removed seven days later without any inconvenience having resulted to the patient in the meanwhile, whilst the good effect of the first operation was well marked. The stricture, which had been carefully dilated, does not appear to have interfered with the progress of the operation, nor to have caused after-trouble.

R. R——, a coachman, aged forty-nine, was sent to Mr. Clutton by Dr. Phillips of Bromley, Kent, in the autumn of 1884. For eight months he had suffered from frequency of micturition; and during the latter part of this time had begun to feel pain at the end of the penis after emptying his bladder. The frequency in passing urine troubled him as much during the night as in the daytime; so that it is open to question whether this particular symptom was not due to the presence of a stricture from which he had suffered for fourteen or fifteen years. He had of late neglected the stricture, and thought that all the symptoms were due to this neglect. He had during the last three or four months noticed blood occasionally in his urine, which had at the same time become thick and ropy. The pain at the end of the penis and an occasional presence of blood in the urine made it probable that there was also a stone in the bladder. A No. 6 silver catheter was with difficulty passed through a stricture at about four inches from the orifice of the urethra. A small-sized sound was then introduced, and a vesical calculus detected. He was therefore admitted at once into the hospital. In the course of a fortnight the stricture had been so far dilated as to admit a steel sound of the size of No. 30 of the French scale. But the symptoms of irritation in the bladder had been much aggravated. He was passing urine almost every half hour, and had to keep a "slipper" constantly in bed. There was also a large quantity of pus and mucus in the urine that he evacuated. It was determined, therefore, at once to give him relief by lithotrity.

On Oct. 15th, 1884, the patient being brought under the influence of an anæsthetic, a Bigelow's lithotrite was introduced and the stone seized. It proved to be about two inches in diameter, but of soft and crumbling consistence. It was therefore very easily crushed, but the amount of débris produced was so large, and the stone had broken up into so fine a powder, that even at the end of an hour and a half a considerable amount was known to be left behind. The weight of the fragments removed at the operation after careful drying was 659 grains, or a little over an ounce and a half; but no great care was taken to preserve all the fluid that came away, so that a good deal of the fine powder was lost.

On the 17th, two days after the operation, he said that he felt better than he had done for some months. He had no pain except some slight scalding in passing urine, and this was accomplished about once in two hours, instead of every half hour. Altogether the relief was very great. The urine also was quite clear, containing only a few fragments of the crushed calculus.

On the 22nd an anæsthetic was again administered and the bladder washed out by Sir Henry Thompson's improved evacuator and a No. 18 cannula, which had been used at the first operation. The second operation lasted about three-quarters of an hour, and the fragments, dried and weighed, amounted to 336 grains. The bladder was again washed out in the same way on the 30th, but very little débris indeed came away.

The patient left the hospital perfectly well on Nov. 4th. The stone was entirely composed of phosphate, and therefore very light for its size; but when thoroughly dried, the total weight of the fragments removed by the evacuator, with those passed in the intervals, was 1026 grains, or 2 oz. 151 grs. The original calculus must therefore have been of considerable size.

Remarks by Mr. CLUTTON.—This case is of interest on account of the large size of the stone, the few symptoms to which it gave rise, and the very short time that these symptoms had existed. There was, moreover, a stricture of the urethra, which increased the difficulties of the case.

LIVERPOOL ROYAL INFIRMARY.

CASE OF DISLOCATION OF THE SHOULDER, REDUCED AFTER ABOUT SEVEN WEEKS, AND FOLLOWED BY ANEURYSM (SUBSCAPULAR?), TREATED SUCCESSFULLY BY LIGATURE OF THE SUBCLAVIAN; REMARKS.

(Under the care of Mr. RUSHTON PARKER.)

THIS case is very interesting as an illustration of a rare accident following the reduction of dislocation of the humerus. The patient was not of an age when one expects degeneration of the vessels, and the dislocation was a comparatively recent one, apparently requiring no excessive force for its reduction. The aneurysm probably followed laceration of the dorsalis scapulæ artery, as suggested by Mr. Parker, and this may possibly have been injured at the point where it turns round the axillary border of the scapula, at which point it would be most exposed to injury during the necessary manipulations.

A woman, aged thirty-six, fell and injured her right upper limb in the first week of December, 1882. To the medical man who attended her she only complained of her forearm, in which he found a fracture, and treated it successfully. Four weeks later, her forearm being nearly well, she went to the Liverpool Royal Infirmary, complaining of her shoulder and general lameness and pain in the limb. On examination the head of the humerus was found dislocated, the limb somewhat œdematous, and the injured forearm satisfactorily healed without deformity. After two attempts at reduction under ether, with the heel in the axilla, by Mr. Harrison's house-surgeon, the case was placed under the care of Mr. Rushton Parker, who is indebted to Mr. Harrison for the opportunity of attending it. Again, under ether, reduction was attempted on Jan. 23rd, 1883. The patient was laid on the operating-table, having a roller towel passed round her chest on the affected side, and looped at the other end to an adjacent iron post, being put on the stretch between. This maintained her fixed while the limb was submitted to linear extension at an angle of about 60° from the trunk. At first the hands of those employed slipped off the œdematous limb, on which another roller towel was hitched on the limb, and steady traction kept up by three or four students, while Mr. Parker directed their movements, clasped the head of the bone, and kept it outwards, while the arm was brought to the side. After prolonged efforts, without any jerking, the bone was found replaced in its proper situation without any indicating sound or perceptible movement at the moment of reduction. The wrist was slung to the neck, with the elbow flexed, and the patient was put to bed. Some ecchymosis resulted and pain in the shoulder, neither more nor less apparently at first than at the previous attempts. But the pain continued; and on viewing the shoulder from time to time to ascertain the cause, there was noticed on Jan. 29th a pulsating swelling over the axillary border of the scapula behind. The pulsation was distensile; the swelling evidently communicated directly with an artery, and its size was about that of a small walnut, with additional induration around. The radial pulse was unaltered on this side, and during the period in which it was examined the position of the aneurysm was more and more conspicuous at the border of or outside the axilla, and near the situation of the dorsal scapular artery or the subscapular at the junction of the two. The swelling under rest in bed did not show any sign of diminution, but rather of increase; it was attended by severe neuralgic pain, that greatly distressed the patient,

who could hardly sleep. At a consultation with his surgical colleagues, Mr. Parker's proposal to tie the subclavian artery was agreed to. This was accordingly done on February 16th, 1884, under ether, with Lister's carbolic acid method and a chromicised catgut ligature. After the skin incision and the closure of its vessels, the fasciæ were divided with two pairs of dissecting forceps, the successive apertures being held open by Mr. Harrison with a pair of artery forceps in each hand. The artery was too deep to thread the aneurysm needle after passing it, so the needle had to be withdrawn and passed threaded. Pulsation ceased at once on compressing the artery against the finger with the ligature, so the latter was tied, cut short, and the wound sewn and drained, being covered with a Lister's gauze dressing. Union by first intention resulted without inconvenience or complication. The blood tumour that had pulsated remained for weeks unreduced in size, and felt so soft that Mr. Parker was tempted to aspirate it. This failed, as the blood was clotted, though soft. Eventually a puncture was made on March 10th, under a stream of carbolic lotion, and some black clot squeezed out. Decomposition eventually occurred, but was quickly corrected by carbolised washing, and entire cicatrisation resulted. The patient was kept in hospital all the summer, her arm being slung the whole of the time, and the stiffness of the shoulder gradually becoming slacker. She was lost sight of, and when sought in April, 1884, could nowhere be found.

Remarks by Mr. PARKER.—Six weeks after an accident one would hardly expect reduction to be so difficult as in this case. The parts were, no doubt, stiffened by the previous attempts, and all rendered difficult by inflammatory stiffening, which may have resulted from her own neglect of the injury, due to her ignorance of its existence and the omission of remedial precautions. The pulsating blood-tumour was a good example of circumscribed traumatic aneurysm that results from arterial rupture subcutaneously. It certainly did not appear to communicate directly with the axillary trunk, and was thought likely to be subscapular or dorsal scapular both from position and behaviour. Under any circumstances this must be a rare situation for aneurysm, though perhaps more likely to follow a stab than any other predisposing cause.

THE FRENCH HOSPITAL.

DISLOCATION OF THE FOREARM, OF EIGHT WEEKS' STANDING; REDUCTION; REMARKS.

(Under the care of Sir W. MAC CORMAC.)

FOR the following account we are indebted to Mr. Alfred S. Gubb, resident medical officer.

Léon P——, aged twenty-four, a musician, on Dec. 23rd last, was returning home late at night, carrying a parcel in each hand, when he was assaulted and knocked down quite unexpectedly. On rising he found himself unable to use his right arm, and any attempt to move it was attended with much pain. The next day he went to a neighbouring hospital, the arm being then very much swollen, where the case was diagnosed to be one of fracture just above the elbow-joint, and the limb was put up in an external angular splint reaching from the shoulder to the wrist. He returned to the hospital several times subsequently, but the arm was left undisturbed, until, being dissatisfied, he went on Feb. 9th to the French Hospital, where the splints were removed and the limb examined by Sir William Mac Cormac, who found a dislocation of both bones of the forearm backwards and slightly outwards. The patient was put under an anæsthetic and the adhesions broken down by flexion and extension movements, and efforts made to reduce the displacement by these and counter-extension. It was, however, only after three-quarters of an hour of very energetic manipulation that reposition was effected. The limb was then put up in fully flexed position, and secured by a plaster-of-Paris bandage. A good deal of swelling and pain followed, which were subdued by the continuous application of the icebag and the administration of opium. The limb was left in this position for a fortnight, and then passive movements were cautiously resorted to. A good deal of stiffness of the elbow and fingers remained, but after another fortnight of massage and passive movement the patient was enabled to extend the arm about forty-five degrees beyond a right angle, and to use his fingers with some amount of comfort. He left the hospital for Paris with every prospect of a useful limb.

Remarks by Sir WILLIAM MAC CORMAC.—Dislocations of the elbow are rare in adults, and in this case the interval was nearly the limit at which a successful reduction can be accomplished. Further, it serves to illustrate the difficulty of diagnosis in injuries to the elbow when the relations of the part are concealed by swelling.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Aneurysm of Abdominal Aorta treated by Distal Compression.—Localisation of Motor Centres in Spinal Cord.

AN ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair.

Mr. T. R. LUNN and Dr. F. L. BENHAM read a paper on a case of Aneurysm of Abdominal Aorta treated by Distal Compression. The patient, a man aged thirty-two, a shoemaker by trade, was admitted into the Marylebone Infirmary, in October, 1883, with a large abdominal aneurysm. He had been in the army nine years, and had syphilis five years ago. There was no history of strain or injury. The urine contained a slight trace of albumen. The patient was not relieved by the usual remedies, including rest, low diet, narcotics, &c. He was evidently getting worse, and was extremely anxious to have some operation done, the danger attending which was explained to him. On October 31st the patient was placed under the influence of chloroform, and compression of the abdominal aorta just above, and to the left of, the umbilicus was kept up four hours and three-quarters with Carte's tourniquet. There was slight vomiting on the first and third days after the operation (apparently due to the morphia and chloroform combined), but otherwise the patient expressed himself as feeling better; the tumour was smaller, harder, and pulsation less marked. The man continued to do well for seven days, but on Nov. 8th persistent vomiting set in, chiefly of a dark grumous material. The pulse was feeble, 192; there was intense thirst, no abdominal distension or pain, some dulness over right lung, the face was congested, and the feet warm. The patient became worse, and died on November 10th, the eleventh day after the operation. At the autopsy the aneurysm was found to be cured, but there was gangrene of about two feet of the jejunum.

Mr. HENRY MORRIS contributed a paper on a case of Gangrene of the Right Lower Extremity, due to an aneurysm which was full of laminated clot, and therefore practically cured. The patient was a man aged thirty-eight, who on December 27th, 1884, suddenly felt, whilst walking, severe pain, numbness, and pricking in the right leg, accompanied by profuse sweating; the left leg was also affected in a less degree, but the mobility and sensibility of the left lower limb returned, though the right remained paralysed and without sensation. On January 1st the patient was admitted into Middlesex Hospital. There was a history of syphilis sixteen years previously. Six months ago he had had lumbago, and later on drowsiness and throbbing of the right temple. On admission there was gangrene of the right lower limb; the femoral artery could not be felt. Some weakness and coldness of the left foot were present. On the right side of the abdominal parietes the veins were greatly distended. It was decided to wait before amputating the gangrenous limb. On January 14th the right limb was amputated through the lower third of the thigh by the circular method; a feeble, tiny stream of blood flowed from the superficial femoral artery. The eighth day after the operation the man died; delirium and diarrhœa had been present, and the urine was albuminous. At the autopsy the intermuscular planes of the stump were infiltrated with badly smelling sanguineous fluid. There was an infarct in the liver, and this organ weighed 71 oz.; the kidneys were swollen, and weighed 7¼ oz. each; in the right kidney there was an infarct. Atheromatous patches were present in the aorta, and an oval aneurysm, full of laminated clot and two inches and a half in length and of the size of a Tangerine orange, was found close to the superior mesenteric artery, which, however, was not involved. The bodies of the first and second lumbar vertebræ were eroded. The blood-clot extended into the aorta. Just above the right profunda artery there was an embolus. The vena cava inferior was completely blocked, as were also the

common iliac veins. The case was brought forward chiefly to show that even an aneurysm which had been cured by nature could by accident cause the death of the patient.

Mr. R. BARWELL said that it was unfortunate that the paper should have confounded proximal and distal compression for the treatment of abdominal aneurysm. There were now four cases of treatment by distal pressure; in two no benefit and no injury resulted. In Mr. Bryant's case the intestinal injury was the cause of death, just as it was in Mr. Lunn's case. He doubted whether the soft spongy clot occurred as the result of pressure, or as the result of arrest of the circulation during the last moments of life.—Mr. BRYANT said that in his case of distal compression he thought he could, with justice, attribute the clot in the aneurysm, not to a recent formation, but to one which had been formed slowly during the compression of the aorta. He considered that Mr. Lunn's case was an encouraging one for the treatment advocated. He asked for further particulars as to the precautions which were taken in applying the tourniquet.—Mr. T. HOLMES said it was open to doubt whether the treatment ought to be described as distal pressure; for there was but little space between the terminal portion of the aneurysm and the bifurcation of the aorta; it was more likely that there was direct compression of the aneurysm. He thought that distal compression was not likely to cure the aneurysm, but more likely to kill the patient. There were so many sources of collateral circulation that a cure was almost impossible. The risk of rupture of sac was great. He was inclined to think that in Mr. Lunn's case there was a genuine tendency to the cure of the aneurysm, for it had the appearance of being firmly consolidated; but he thought that this consolidation was not the result of distal pressure on the aorta.—Mr. HULKE concurred with the remarks of Mr. Holmes, and doubted whether the exact seat of the pressure could be definitely asserted, even when it was supposed to be applied proximally. In two out of three cases which had been under his observation there was direct pressure on the aneurysmal sac. The result in all his cases was successful, and the aneurysm was consolidated. Nevertheless, the dangers were great, and considerable risk must be run.—Mr. H. MORRIS spoke of a valuable contribution to the subject made by Mr. Barwell to "Ashhurst's Encyclopædia of Surgery." There were ten cases in which proximal pressure had been used, with recovery in five cases and death in five cases. Death was due to bruising of the intestine and peritonitis. It was a question as to how far the intestinal injury was due to direct pressure on these structures or to embolism of the superior mesenteric artery. He would like to know what chance there would be of gangrene of the intestines when the superior mesenteric artery was occluded. We had to do with the same dangers whether proximal or distal pressure were employed. He spoke on a subject to which he had already drawn attention—viz., that aneurysms may be cured by nature and yet bring about the death of the patient. His own case proved this, as did also a case of aneurysm of the ascending aorta in which consolidation had taken place; but a minute rent formed, through which leaking into the pericardium took place and caused death.—Mr. JONATHAN HUTCHINSON doubted whether medical treatment was wholly powerless to cure cases of abdominal aneurysm situated high up on the aorta. He referred to a case of his reported in "Holmes' System of Surgery," in which the free administration of diacetate of lead to the degree of producing a blue line on the gums and lead colic was carried out, together with the use of ice-bladders over the abdomen, a dry diet, and absolute rest. In this case within three months there was a complete cure, and the man went to work. He agreed with Mr. Holmes that there was a very great risk of causing the death of the patient by the method of distal compression. In ergot of rye, diacetate of lead, and iodide of potassium we had powerful drugs which might be used in combination, and which were able to exert a very important influence on the state of the blood and arterioles.—Mr. J. R. LUNN, in reply, said that before the tourniquet was applied the bowels were thoroughly emptied, and the bladder also. Gradual pressure was made after the skin and tourniquet had been properly dusted with powder. Carte's tourniquet was a very convenient one. The patient was a most restless man and difficult to keep at absolute rest, though this and large doses of iodide of potassium had been attempted for a period of one month without benefit.—Dr. BENHAM, in reply, quoted some references to prove that embolism of the branches of the superior mesenteric artery could cause gangrene of the intestines. He was of opinion that the pressure of the tourniquet was distal and not immediate.

Dr. C. E. BEEVOR read a paper on two cases illustrating the Localisation of Motor Centres in the Brachial Enlargement of the Spinal Cord. The first case was one of progressive muscular atrophy, occurring in a goldbeater and lamplighter, aged thirty-eight. The disease commenced three years ago, with gradual wasting and loss of power, beginning in the muscles of the back of the right forearm, the muscles of the hand and the interossei, and involving other muscles of the right arm. The left arm was affected a year later, with difficulty of supinating the forearm, flexing the elbow, and abducting the shoulder-joint. The legs have been weak for the last six months. At present the muscles most affected on the right side are the small muscles of the hand and interossei, the flexors and extensors of the wrist and fingers, the teres major, serratus magnus, deltoid, biceps, brachialis anticus, supinator longus, rhomboid, and teres minor. On the left side the same muscles are affected, except the small muscles of the hand and the flexors of the fingers; while, in addition, the clavicular part of the pectoralis major are slightly affected, and the supra- and infra-spinati are involved. The second case was that of a young man aged eighteen, suffering from infantile paralysis. The onset was sudden when the patient was a year old, with paralysis of all four limbs, of which the legs and right arm have recovered fairly well, while the left arm has remained more paralysed. At present, in the right arm, the only muscles affected are the latissimus dorsi, triceps, and pectoralis major, the sternal part of which is absolutely gone. On the left side, in addition, the teres major, subscapularis, rhomboid, supra- and infra-spinati, and teres minor are severely affected; while the extensors of the fingers, serratus magnus, and deltoid are only slightly involved. There was nothing of great importance in the course of the two cases; but they were brought forward to illustrate clinically the groups of muscles found by Professors Ferrier and Yeo to be thrown into action by faradising the peripheral ends of the divided anterior motor roots forming the brachial plexus. These groupings were shown in some tables, and side by side with them were given the muscles found to be affected in these two cases. On comparing the cases, it will be seen that whereas in the case of progressive muscular atrophy the groups of muscles severely or completely affected belong chiefly to the fourth, fifth, and eighth cervical and first dorsal nerves on the right side, and mainly to the fourth and fifth cervical nerves on the left side, in the case of infantile paralysis the opposite holds good, for on the right side the only muscles affected (the triceps latissimus dorsi and pectoralis major) are innervated, according to Ferrier and Yeo, only by the sixth and seventh cervical nerves, whilst the rest of the groups are unaffected; and on the left side the sixth and seventh cervical nerves are most affected, and also some muscles innervated by the fourth and fifth cervical are partially paralysed. The reaction of the muscles to electricity (faradisation and constant current) has been ascertained, and they correspond to the degree of power lost and to the amount of wasting, and are quite in accordance with the above groupings. A third case of infantile paralysis was also described affecting the muscles of the right arm, corresponding to the sixth and seventh cervical only—viz., teres major, latissimus dorsi, subscapularis, pectoralis major (sternal half), triceps, and serratus magnus. It should be remarked that Ferrier and Yeo's experiments were made on the motor roots, but it is considered that the groups of muscles thereby differentiated can be equally applied to the cells of the anterior cornua supplying these nerves, and these cells are known to be affected in progressive muscular atrophy and infantile paralysis.—Dr. HUGHLINGS JACKSON said that Dr. Beevor's observations were an example of a kind of work that was much wanted. Ferrier's experiments gave us some clue to the nature of the mixing up of the nerves at the level of the lowest centres. Lesions of the cervical region of the spinal cord were known to have an influence on the pupil. In these cases the pupil was small and unable to dilate when the eye was shaded. Stabs of one half of the cord illustrated this, as did also cases of rupture of the brachial plexus. Ferrier's experiments were more definite in this regard, for they showed that it was only the second dorsal motor root in the monkey which contained the dilating fibres of the iris. Stimulation of this root causes dilatation of the pupil and contraction of the intrinsic

muscles of the hand. In a case of progressive muscular atrophy under his care the intrinsic muscles of the hand were affected, and there was smallness of the pupil on the same side, and inability of the pupil to dilate when the eye was shaded, thereby affording a clinical corroboration of the experimental work. A case of Mr. Rivington's also bore out the same fact.—Dr. FERRIER said it was important that his and Yeo's experimental observations had been corroborated and verified by clinical research of so laborious a kind as that which Dr. Beevor had undertaken. The intricate plexiform arrangement of the brachial and crural nerves had long been a physiological puzzle, and his experiments were undertaken with a view to clear up the mystery. He and Yeo had found that each root of the brachial plexus of the monkey answers to a distinct and well-defined muscular action due to coördinate contractions and relaxations of groups of muscles. It was most probable that centres of complex coördination existed in the brachial enlargement of the spinal cord. Stimulation of the cervical nerves going from the upper part of the brachial swelling gives rise to a combined and coördinate movement in which the deltoid, biceps, brachialis anticus, and supinator longus muscles took part, as in the act of raising the hand to the mouth. He referred to some observations in human anatomy made by Dr. Cunningham, which showed that twenty-seven out of thirty-seven subjects examined the second dorsal nerve sent a contribution to the brachial plexus. If this relation were found to hold good, then there would exist a complete harmony between the nervous relations of the brachial plexus in man and monkey. It was important to decide whether the nuclei of all the muscles were present in each segment of the brachial swelling or whether they were arranged in a linear order. In his opinion the facts of anterior poliomyelitis seemed to show that in each segment we have the nuclei of all the muscles. Neurologists had come to recognise an upper arm type and a lower arm type, and he believed that there were as many distinct types as there were groups of muscles. In the middle of the brachial enlargement there was a coördinating centre which presided over the latissimus dorsi and pectoralis major and the rotators of the shoulder-joint. It was highly probable that in the spinal cord there were mechanisms for the carrying out of complex coördinate actions, and he believed his experiments had roughly mapped out the chief of these mechanisms.—Dr. BEEVOR said that in one of his cases the right pupil did not dilate when shaded, and so resembled the instance of which Dr. H. Jackson had spoken. In this case the first dorsal nerve supplied the group of affected muscles, and therefore still further corroborated the views of Ferrier.

CLINICAL SOCIETY OF LONDON.

Amputation at the Hip-joint.—Pityriasis Circiné.

AN ordinary meeting of this Society was held on April 10th, Mr. Thomas Bryant, F.R.C.S., President, in the chair. There was a well-sustained discussion on the surgical papers.

Dr. LEWIS W. MARSHALL read a paper on Amputation at the Hip-joint by Furneaux Jordan's Method. The author, in giving a record of ten amputations at the hip-joint by this method, mentioned at the outset the fact that a paper had been previously published by him in the *British Medical Journal*, October 27th, 1882, on the same subject. He likewise mentioned that Dr. Maclaren of Carlisle also read a paper in Edinburgh, which was published in the *British Medical Journal*, June 7th, 1884. He gave a brief account of the two methods of operating suggested by Mr. Jordan in THE LANCET, March 23rd, 1879, stating that he himself preferred the second method, which was done by making the circular sweep through the soft parts first, the enucleation of the femur being the second step. Of Dr. Marshall's ten cases, three were done after excision, and the remainder when this operation could not be practised on account of extensive implication of the femur or pelvis, or from the general condition of the patient prohibiting more conservative measures. The ages of the patients were as follows: two at eleven, one at ten, two at eight, two at seven, one at six, one at five, and one at three years. In all but one the fingers were used to compress the femoral artery in the groin. Esmarch's bandage and Davy's lever were spoken of, and had been used, the latter in the only case which has to be recorded as a death in this list. This death occurred within a few hours after operation from shock, the result of loss of blood. The amputation was on the right side. The patients are living and well, with the exception of two. These deaths were due to visceral lesions. The dressing used in each case was a loose antiseptic covering of carbolic oil and lint. Stress was laid upon the after-treament of the patient. Food was withheld by the mouth for some hours, if iced champagne be excepted, nutrient enemata being given instead. An extract was read from Mr. Jordan's paper, detailing the advantages of his method over the older flap operation. The reason given for the choice of the second method of operating was as follows:—"That the increased length of leverage gained by freeing the limb from the main attachment of the muscles enables the fingers and the knife to pare the muscles off from the bone with much less risk of wounding vessels unnecessarily." It was also stated that the separation of the tough bands which in old-standing cases of hip disease weld the trochanter and what exists of the neck of the femur so closely to the pelvis is rendered easier and more rapid. The fact of the gluteal vessels remaining untouched was insisted on. Dr. Marshall also spoke of the possible risk to the patient when disease was present in the pelvis by the use of Davy's lever. The use of this instrument appeared to be undesirable, because the efficacy of the nutrient enemata might be interfered with. Mr. Wright, Senior Surgeon to the General Hospital, Nottingham, controlled the common femoral. The hand in the groin for this purpose was in no way a hindrance to the operator. The femoral artery was always tied after the circular incision was made. The stump left by Jordan's method was said to be all one could wish for. A case in which albumen in the urine had been present for some time, and where the liver was enlarged to the umbilicus, is now living and well. The albumen could be found up to ten months after amputation. In two other cases large deposits of albumen were present when amputation was done.

Mr. JONATHAN HUTCHINSON read a paper entitled a Plea for Amputation at the Hip-joint in certain Cases of Advanced Suppurative Disease. The author commenced by stating that he had no new method of treatment to recommend, but simply the more liberal adoption of an old one. He believed that not a few cases of advanced suppurative destruction of the hip-joint would be more safely treated by amputation than by excision or by rest; especially did this remark apply to cases in which the limb was diseased at other parts, and damaged as regards its usefulness. He included also some which after excision were not doing well. In all cases in which such conditions existed, he felt sure that the surgeon would do well to remember that amputation at the joint was usually very successful even in cases of extreme exhaustion. It was also usually followed by rapid restoration to good health. The difference between operations for disease and for tumours was very great. The former were attended by obvious relief from the very first, the latter not unfrequently by severe shock. Bearing this in mind, he felt sure that it was often a mistake in practice when open suppuration was established, and the patient's strength failing, to delay or decline amputation at the hip-joint. In looking back in his own practice he recollected several cases in which he much regretted not have done so. In such the patient was always in danger of the development of lardaceous disease, as well as in risk of his life from hectic or some intercurrent malady. Particularly in adults is the hopefulness of recovery from suppuration of the hip-joint very poor. Several cases were related. In one, in an adult, there was disease of hip and knee together, and in another disease of hip and femur together. Both were in a state of extreme exhaustion, and both recovered well. In another case, in a boy, the operation was done in spite of advanced lardaceous disease and an enormous liver, with the result of greatly improved health and diminution of the liver. In a fourth case, in which extreme exhaustion from suppuration was the reason for amputation, erysipelas had attacked the limb on the day before the operation, yet a successful result ensued. The author stated that he had not in any single case lost a patient as the immediate result of the operation, nor was he aware that anyone had subsequently died. Respecting two, however, he was obliged to report that they had not regained good health nor had their sinuses healed when last seen. As regards the mode of operation, it had varied with the nature of the case. Of late he had used Furneaux Jordan's method, of which he

thought highly. In one, done by that plan, with stripping up of periosteum, a long stump which appeared to contain bone was obtained. In all cases of late years some antiseptic method of dressing had been adopted, usually a strong lotion of lead and spirits of wine had been applied, but in some Lister's gauze dressings had been used. The paper concluded by the mention of cases in which, after consultation, the operation had been declined or deferred, on the plea that the patient would probably recover without it, and in which an opposite result had occurred.—Mr. HOWARD MARSH considered that the subject required a great deal more attention than had been given to it. In his experience amputation at the hip-joint was a very valuable step to take in certain desperate cases. The tendency to the performance of this operation had increased of late at the Hospital for Sick Children, and he himself had performed the operation six times, and had seen it performed many times besides; death very rarely occurred. He had used Davy's lever many times, and he had found it one of the best appliances that had been introduced into surgical practice. By its use the operation was rendered as nearly as possible bloodless, for it controlled not only the common femoral artery, but also the posterior division of the internal iliac artery. He had three times performed Furneaux Jordan's method, and said that it took a long time to do, and the size of the wound was increased. There was less risk of hæmorrhage from the posterior flap if Davy's lever were used, and with it the old flap method could be done much more quickly than Furneaux Jordan's operation. In the latter operation amputation lower down could be done, so as to obtain a longer stump for the adaptation of an artificial limb; this and the subperiosteal method were noteworthy points in the case shown by the late Mr. Shuter to the Society. In this case there was a central stem in the stump, which had the consistence of bone, though it was probably not composed of osseous tissue. The disappearance of the signs of amyloid disease after removal of the strumous disease was a most important and well-ascertained fact. Moreover, the presence of lardaceous disease need form no bar to the operation. Some years ago, when he was a member of the committee for investigation into the treatment of hip disease by different methods, it was ascertained that death occurred in 33 per cent. of the cases treated by any method, and so it was a well-ascertained fact that death could result from hip-joint disease.—Mr. GOLDING-BIRD said that Furneaux Jordan's operation was very much like Fleuret's modification of Larrey's operation on the shoulder-joint. He advised that the circular incision should be made in two portions, the second circular incision to be performed after enucleation of the bone; the second circular division divides the vessels last. The vertical incision should be made first, as it enables the joint to be examined and the kind of operation to be decided upon.—Mr. R. BARWELL shared almost the same opinions as those which Mr. Hutchinson had expressed. In a case in which the liver reached as low as the umbilicus there was albuminuria, with large hyaline casts, and amputation was performed for strumous disease of the hip-joint. He urged that frequent microscopical examinations of the urine should be made, for the presence of narrow casts with albuminuria contra-indicated the operation of amputation, as the small casts, he believed, indicated deeper affection of the kidneys. Statistics showed how very much more favourable were amputations done for chronic strumous disease as compared with those performed for tumour or injury. He testified to the great value of Davy's lever, though this agent had sometimes caused bruising of the iliac vein and its consequences. He agreed with Mr. Marsh that Furneaux Jordan's method, being more tedious, might be dispensed with now that Davy's lever could be used.—Mr. BLACK spoke of the elastic tourniquet, and said that it perfectly controlled the circulation through the lower limb. Out of forty cases of amputation at the hip-joint in which Mr. Davy had used the lever, there was but one case in which the intestine had been damaged or any injury had resulted.—Mr. WARRINGTON HAWARD said there was no doubt that for strumous disease amputation was a different matter than for tumour or injury, and much more favourable. He spoke of the enlargement of organs, and said that he remembered a case in which this diminution occurred where there had been no surgical interference. He believed in the use of Davy's lever, and had employed it successfully in a case of ruptured gluteal artery. He considered that it might be as easily used for the right as the left limb. Mention was made of the use of a cone of wood suitably padded for compressing the abdominal aorta, which was less distressing than Lister's tourniquet. In reply to Mr. Hutchinson, he said the case in which spontaneous diminution of the liver took place there was chronic hip-joint disease, which also receded under medical treatment.—Mr. BRYANT said that his experience was to the effect that amputation in such cases was unusually favourable, but he considered with Mr. Hutchinson that some surgeons were apt to postpone the operation unnecessarily. The value of the long stump was remarked upon. He would not dispense with the subperiosteal method, for it gave rise to less disturbance in the muscles about the part, and left a dense hard mass of new tissue, probably not bone, but fibrous in nature. He did not think it a matter of much importance whether the vertical or circular incision was made first. Davy's lever was not so successful as was at first believed, for, in addition to injury of the intestine, it had also caused bruising of the iliac veins. A means employed by Mr. Lloyd of Birmingham was favourably spoken of; a folded indiarubber bandage was passed round the buttock, between the anus and the ischial tuberosity, and then over the hip, so as to press on a roller placed along the line of the external iliac artery.—Dr. MARSHALL, in reply, said that one point had been overlooked in his paper, and that was that all his operations were done on children. He had used Esmarch's bandage, though it slipped in one case. Stress was laid on the importance of rectal alimentation during the period of vomiting and collapse. He said that Dr. Maclaren found, by experiment on the dead body, that the flap operation took but eleven seconds less to perform than Furneaux Jordan's operation. The operation he advocated was followed by less shock, and there was less chance of septic inoculation.—Mr. HUTCHINSON, in reply, said with regard to the use of Davy's lever, he shared the opinion which the President had expressed. He had found that an elastic strap placed round the abdomen, compressing a large towel placed over the aorta, was most effective in controlling hæmorrhage. The method of Furneaux Jordan gave a better stump, though the time required for the operation was rather longer.

Dr. COLCOTT FOX read a paper on a Peculiar Form of Skin Disease, with the object of drawing attention to an affection of the skin accurately described for the first time by Hovaud of Lyons, in the seventh volume of the first series of the *Annales de Derm. et de Syph.* Dr. Fox had met with seven cases in the last two or three years, and thought the disease was a distinct morbid entity resembling Willan's roseola annulata in appearance, but running a chronic course. The lesions were slightly raised, rounded, the smaller uniform in aspect, the others depressed in the centre with only the borders raised, which gave them a distinctly circinate form. Their colour varied from a pale-rose to yellowish-white, approaching to the tint of the surrounding skin, so that one could sometimes with difficulty distinguish them from the rest of the integument. Often the border alone was coloured. The eruption was constituted by discrete or confluent patches, of which the dimensions varied ordinarily from a lentil to a two-franc piece. They exceeded these dimensions only in rare cases. The maculæ were constantly dry, their surface was more or less furfuraceous. They were accompanied by a little itching, especially when they were excited and reddened by heat or bathing. The eruption seemed to commence nearly always on the trunk and extended thence to the limbs, and disappeared in the order of its invasion. Its etiology was very obscure. Hovaud's cases were met with between the ages of eight and thirteen, and Dr. Fox had seen the eruption at four years of age. He then detailed two cases of a somewhat similar condition in children, which he believed to be the pityriasis circiné et marginé of Vidal, only there was considerable symmetry. The eruption was almost universal, and the maculæ rather larger than in the affection portrayed by Hovaud. In these cases the patches were found to be invariably crowded with masses of micro-organisms. The hairs were unaffected, and there was no mycelium. Repeated attempts to inoculate the cultivated organisms had failed. He had already met with a similar organism in two cases of psoriasis in children, and it was possible that the micro-organism was commonly to be found amongst the desquamating epithelial scales of children's skins. A stained preparation was exhibited to the meeting.—Dr. GLOVER spoke of a case of the disease affecting the bare portion of the neck; the eruption was present in a young lady, aged twelve, and had the appearance of psoriasis guttata; it was slowly getting well.—

Dr. S. MACKENZIE said the microscopical appearances of the fungus were highly suggestive of a micrococus, as was also the fact that no mycelium had been discovered either by Vidal or Dr. FOX. Moreover, the micro-organism occurred in a variety of diseases. Further, in no case had there been any extension of the cutaneous disease to other individuals.—Mr. HUTCHINSON asked questions as to the cause of the malady and mode of cure. He was acquainted with a form of pityriasis which always commenced on the trunk and never affected the hands and feet, though it nearly always extended secondarily to the limbs. This eruption he believed to be due to the wearing of peculiar vests, and it might assume a great variety of forms; the eruption certainly spread to parts of the limbs where the vest or other offending article of clothing did not touch. If these patients wore silk next the skin, he found that the eruption disappeared.—Dr. FOX agreed with Dr. Mackenzine, and said that it was not he who had given the long name to the affection; of its cause he knew nothing.

Dr. Sidney Phillips showed a living specimen of Sporadic Cretinism, and Mr. Strugnell one of Total Paralysis of the Fifth Nerve.

MEDICAL SOCIETY OF LONDON.

Myxœdema.—Uncomplicated Brachial Monoplegia from Lesion of the Internal Capsule.

AN ordinary meeting of this Society was held on the 13th inst., Dr. W. Miller Ord, President, in the chair.

Dr. WHIPHAM read a paper on a case of Myxœdema, and showed microscopical specimens of some of the organs of the body. The patient was a female aged twenty. She had suffered from rickets, and the tibiæ were still bowed on her first admission to hospital. She had been languid and weak ever since the catamenia appeared. Up till two or three years ago she had had abundant very long golden hair, but this all fell out, and has grown but very slowly since. On admission she was ill-nourished and apathetic; red hair grew low on the forehead, and there was much downy hair on the temples. Her manner was slow. The abdominal swelling of which she complained had been coming on for three or four years. Slight œdema of the legs and occasional puffiness of the face were present. Polyuria had existed for several years. For the last three weeks the abdominal swelling had increased; there was anæmia, vomiting, and some swelling of the legs; the pulse was 88 per minute, very weak, and compressible; the feet and hands were large, the skin over them coarse, red, and cold; the urine was acid, albuminous, and had a specific gravity of 1016; the teeth were markedly notched. After some purgative treatment, the ascites was treated by Southey's tubes, and ten pints of fluid withdrawn. She then left the hospital, and was readmitted a year later, having lived in a state of complete idleness. She had had profuse menorrhagia. At the end of 1882 she manifested all the signs of myxœdema. She had previously been treated by the late Dr. Barclay as a case of chronic peritonitis. The thyroid body could not be felt. The ascites slowly and persistently increased; eight pints of viscid clear fluid were withdrawn; at one time diarrhœa was present. The temperature was rarely above normal. In August last she was sent into the hospital with pneumonia; the ascites was relieved by tapping; pericarditis supervened; and the patient died, the temperature having been between 102° and 103°. At the autopsy the body measured five feet two inches; the calves were very large; the left gastrocnemius weighed twenty-one ounces. There was a little lymph and fluid in the right pleural cavity. The upper lobe of the right lung was in a state of red hepatisation. In the submucosa of the stomach some patches of "mucous" tissue were seen. There were twenty pints of mahogany-coloured fluid in the peritoneum. In the brain behind the right locus niger there was a small deposit of hæmatoidin. Sections of the organs were made by Dr. Heneage Gibbes. In some parts of the brain there was an increase of the fibrous tissue in the perivascular spaces, and in places the vessels were enormously distended; in places the vascular walls were thickened. There was an increase of the fibrous tissues of the branches of the capsule of Glisson; the hepatic cells were compressed by intervening hyaline exudation. The signs of chronic interstitial nephritis were also present in patches, and in places the tubules were separated by hyaline material (œdema). The interstitial tissues of the pancreas were swollen and œdematous and bacteria were found. The ovaries were œdematous. The tongue had a general appearance of œdema and the muscle fibres showed a tendency to transverse cleavage. Œdema beneath the sarcolemma was detected in the muscle-fibres of the upper lip. In the pulp of the right middle finger the fibres were separated by œdema. Tubercular lesions were present in the lymphatic glands. The aorta showed thickenings and atheromatous changes. The case was compared with the description of the tissues given by Dr. Ord and Sir W. Gull.—Dr. ORD said that he now believed there were more changes in the connective tissue of the central nervous system than he had formerly admitted. He inquired whether any chemical investigation of the amount of mucin had been made.—Mr. VICTOR HORSLEY remarked on the presence of disease of the vessels in myxœdema. In cases of myxœdema symptoms of premature senility, with tremors and general weakness, were present. The thyroid gland in old age would be found to be greyish in colour; its weight was notably diminished. He thought that microscopical examinations of the thyroid in old age were much wanted.—Dr. HADDEN said that he had examined the thyroid gland in six or seven cases of myxœdema. Outside the acini there was a round-celled infiltration, which became organised into fibrous tissue; the cells of the acini underwent proliferation and became fibrous in structure. He had also found fibroid overgrowths in the portal canals. He was now investigating the condition of the thyroid gland in persons dying from any disease.—Dr. A. ROUTH asked whether the ovaries always presented the appearance Dr. Whipham had described, and made some remarks on the state of the catamenia.—Dr. WHIPHAM, in reply to the President, said no chemical examination had been made. He could give no further information concerning the ovaries and menstruation.

Dr. HUGHES BENNETT and Dr. M. C. CAMPBELL read a paper on a case of Brachial Monoplegia due to Lesion of the Internal Capsule. The patient was a man aged eighty, who, when in a condition of fair health, suddenly lost consciousness; on regaining his senses he was found to have lost his speech, and the left side of the face and the left upper extremity were paralysed. With the exception of the paralysis of the arm, he recovered from these symptoms. There was no rigidity of the affected muscles, and the sensibility was everywhere normal. This condition persisted for about six weeks, when the patient died from old age and general break-up of the constitution. The essential lesion found on post-mortem examination was a limited defined softening, about the size and shape of a small horsebean, but flatter, occupying the upper part of the internal capsule without seriously involving any of the neighbouring structures. It was stated that uncomplicated brachial monoplegia caused by a lesion of the internal capsule was of extremely rare occurrence, and from the circumstances likely always to be so. That such a lesion should have existed in the present instance suggested some interesting physiological and anatomical considerations. As all the conducting fibres from the different motor centres of the cortex are collected together at the internal capsule and pass through it in a very limited space, it is evident that if a small flat lesion causes paralysis of one limb only without affecting the others, the fibres from such motor centres must pass through the capsule in separate bundles. A diagram was shown and explained to attempt to define the course and position of these conducting fibres, as they run from the cortex cerebri through the corona radiata to the internal capsule. Dr. Bennett contended that both anatomical and pathological facts seemed to indicate that these conducting parts, which at first run from the cortex arranged in a lateral direction, as they entered the capsule bent upon themselves, passed through it in bundles, arranged in an antero-posterior fashion, those of the face being the most anterior; next in order coming those of the arm, leg, and trunk. In this case a limited disease destroyed only the fibres conducting motor impulses to the arm, leaving those of the face and leg on each side of them intact, thus supporting the above theory.—Dr. ORD spoke of the many-sided value of the case in question.—Mr. V. HORSLEY referred to a paper published by him in THE LANCET, vol. ii., p. 7, 1884, and said that the case bore out some views on "substitution" therein stated. The case also overthrew the theory of Munk, that the cortical centres were both sensory and motor, for the lesion merely removed the power of originating movement, and did not affect sensation in any way. The case also went against the view

of Hughlings Jackson on bilateral representation of the limbs, for there was no recovery of power, even after some weeks had elapsed.—DR. KINGSTON FOWLER showed a patient suffering from nervous disease which began in the first instance as a case of left brachial monoplegia. He had no doubt then that there was a cerebral lesion of specific origin. Headache, diplopia, and partial blindness, with squint later on, were the early symptoms of the case. Some numbness along the course of the left ulnar nerve was present. After an attack, in which the patient was giddy and lost consciousness, the left arm was found to be paralysed; the left leg and face were also slightly affected. There was greatly delayed sensation on the left side, and the special senses were also affected on the same side. There was no optic neuritis. Under antisyphilitic treatment there was some recovery of power and return of sensation in the left limbs. At the early part of the present year an attack left him powerless in the right upper limb. There was also delayed sensation and delayed appearance of the reflex actions. A blow on any part of the body caused the head to be thrust forward. There were no knee-jerks.—Dr. H. BENNETT briefly replied.

Reviews and Notices of Books.

The International Encyclopædia of Surgery. Edited by JOHN ASHHURST, M.D. Vol. V. Pp. 1207. London: Macmillan. 1885.

THIS handsome volume contains articles by fourteen contributors, of whom seven are American physicians and surgeons of repute, five Englishmen, one Scotchman, and one Irishman. They are in order as follows. 1. Injuries of the Head, by Charles B. Nancrede, M.D., Professor of General Surgery in the Philadelphia Polyclinic. 2. Malformations and Diseases of the Head, by Frederic Treves, F.R.C.S., Lecturer on Anatomy, London Hospital. 3. Injuries and Diseases of the Eyes and their Appendages, by E. Williams, M.D., Professor of Ophthalmology in Miami Medical College, Cincinnati. 4. Injuries and Diseases of the Ear, by Albert H. Buck, M.D., of New York. 5. Diseases and Injuries of the Nose and its Accessory Sinuses, by George M. Lefferts, M.A., Clinical Professor of Laryngoscopy, Columbia College, New York. 6. Injuries and Diseases of the Face, Cheeks, and Lips, by Alfred C. Post, M.D., Emeritus Professor of Clinical Surgery in the University of the City of New York. 7. Injuries and Diseases of the Mouth, Fauces, Tongue, Palate, and Jaws, by Christopher Heath, F.R.C.S., Holme Professor of Clinical Surgery in University College, London. 8. Surgery of the Teeth and adjacent parts, by Norman W. Kingsley, M.D., Professor of Dental Art in New York College of Dentistry. The most original and perhaps the best article in the volume is the first, by Charles Nancrede. His experience and reading have been alike large, and the rules he gives are well worthy of consideration, though they are not always in accord with the text-books. Thus, in cases of simple depressed fractures he approves the use of the trephine and the elevation of the depressed portion; he thinks that the dangers of a simple depressed comminuted fracture are greater than those which follow its conversion into a compound fracture. Numerous and interesting cases of injuries to and of foreign bodies in the brain are given, and excellent rules are laid down for the determination of the fissure of Rolando and other points in cerebral topography. Dr. Williams's essay on Injuries and Diseases of the Eye occupies 120 pages, and is very complete. He commences with a short description of the anatomy of the orbit, eye, and its appendages, and then proceeds to consider the affections of the orbit; and some interesting cases are rather fully given. Wounds of the eyeball are then discussed, and good rules to determine whether a foreign body has penetrated or not are appended. He dwells very properly on the danger of wounds in the ciliary region, and records a case that young surgeons should bear in mind. A young lady, as a result of a perforating corneal ulcer, had a large prolapse of the iris, which, though disfiguring, was not apparently troublesome. Dr. Williams in an evil moment, clipped it off with scissors. Iritis followed of a persistent character, and after some time sympathetic ophthalmia of the opposite eye followed, leading to complete disorganisation and blindness. He may console himself with the reflection that the same untoward result has occurred in the practice of other ophthalmic surgeons besides himself. Dr. Williams thinks that an attack of sympathetic ophthalmia is preceded by a warning irritation in the sound eye, and that if this be recognised, and the offending eye be promptly removed before inflammation is established, the patient is saved from blindness. We are inclined to agree with him in the case of adults, but with children we think the rule should be general that in punctured wounds with knives, scissors, pins, or other similar instruments in the ciliary region the eye should be removed. It is almost impossible to keep a child quiet or to maintain a bandage upon both eyes, and irritation in them runs insidiously and rapidly into inflammation. The symptoms and treatment of purulent ophthalmia in children are of course well given, but the writer does not mention the prophylactic measures adopted with such success by Crédé, of using antiseptic vaginal injections just before delivery. The treatment of diseases of the cornea is treated at unusual length and with great ability. In regard to cataract, Dr. Williams operates without anæsthetic, and without dilatation of the pupil. He makes the section of the cornea at, or a little in front of, the sclero-corneal junction; he performs iridectomy; he carefully clears the pupil of fragments of the lens; he changes the dressings twice a day, and in ten days removes them altogether; he does not allow the use of glasses till six weeks have elapsed. The method and the details given are all unexceptionable, and may be followed implicitly by all who are about to operate. For the relief of glaucoma the writer practises iridectomy, but speaks doubtfully about sclerotomy. The chromolithographs, both of the diseases of the conjunctiva and iris, and of the ophthalmoscopic appearances of the eye in disease, are poor and unrepresentative. Mr. Bencke, the lithographer, could, we imagine, turn out something better than these. No satisfactory drawings of the fundus can be produced with only two or three tints.

The article by Dr. Buck on Injuries and Diseases of the Ear follows that on the Eye, and runs to about seventy pages. Dr. Buck considers Wilde's ear speculum, if made of silver, highly polished, and very thin, as the best means of exploring the meatus, when aided with a good forehead mirror, with a focal distance of twenty centimetres. He gives a very full description of the various maladies of the external ear, including eczema, diffuse inflammation, perichondritis, contusions, deformities, frost-bite and burns of the auricle, and impacted cerumen, common boils, ulcers, wounds, and new growths of the auditory meatus. In speaking of the modes of examining the middle ear, Dr. Buck gives Valsalva's and Politzer's methods and describes the mode of employment of the Eustachian catheter. He supplies some important and very useful directions with regard to the contra-indication for the use of Politzer's method, which, we fear, are often neglected. It should never be adopted, he says, until after both drum membranes have been examined, nor when there is a deeply depressed membrane, which may possibly be adherent to some of the deeper parts of the middle ear, nor when the drum membrane is atrophied or presents a thin cicatrix, nor when actually inflamed. When abscess of the tympanum exists, he has no hesitation in perforating the membrane, avoiding the dangerous region of the upper half of the posterior superior quadrant. The diseases of the mastoid

process follow, with a very short section on affections of the auditory nerve. The article is illustrated by many woodcuts of instruments, some of which are novel, and an excellent chromolithograph of the morbid appearances presented by the membrana tympani. Though brief, Dr. Buck has managed to compress into the space at his disposal nearly all that is important in his special subject. We may say the same of Dr. Lefferts' essay on a subject not generally given in full in surgical works—namely, the Diseases and Injuries of the Nose and its Accessory Sinuses, which, of course, involves a description of the examinations of those parts known under the names of anterior rhinoscopy and pharyngo-rhinoscopy. The article on Injuries and Diseases of the Mouth has been entrusted to Mr. Christopher Heath, and is thoroughly and comprehensively treated, though Dr. Port still finds something to say on Injuries and Diseases of the Face, Cheek, and Lips, and Dr. Macleod on the Injuries and Diseases of the Neck. Both Mr. Morris's article on Injuries and Diseases of the Abdomen and Mr. Treves on Malformations and Diseases of the Head are very creditable productions. No better exponent of the modern views on the Varieties and Treatment of Hernia could have been found than Mr. John Wood. The volume as a whole well sustains the repute of those which have preceded it, and it may be consulted with advantage by even the most accomplished surgeon.

Topographical Anatomy of the Brain. By J. C. DALTON, M.D., Professor Emeritus of Physiology in the College of Physicians and Surgeons, New York, and President of the College. Philadelphia: Lea Brothers and Co. 1885.

THIS is one of the most magnificent works on anatomy that has appeared during the present generation, and will not only supersede all its predecessors on the topographical anatomy of the brain, but make any further work on the same lines unnecessary. It is published in three volumes, and contains forty-eight exquisite illustrations of the brain, *en masse* and in sections. The specimens were prepared by Dr. Dalton and photographed by Mr. G. Mason, photographer to the Bellevue Hospital, New York. Heliotype transfers were then made from the original negatives, and the plates printed by the Heliotype Printing Company of Boston. In this manner not only has perfect accuracy been secured, but one of the finest and most artistic works of recent times has been presented to the medical public. Its value as a work of reference is considerably increased by the very careful outline sketches which accompany the plates, and which enable them to be easily followed and understood. These sketches are very complete and accurate, and have been reproduced from tracings made by Dr. Richard Lennox of the Roosevelt Hospital, New York. The first volume is devoted to the exterior convolutions, and contains ten plates corresponding outline sketches, and the explanatory descriptions; in the second volume fifteen horizontal sections, and in the third volume twenty-three vertical sections, are similarly shown and explained. The descriptions by the author are clear, precise, and accurate; and the methods by which the sections were made and the specimens reproduced are given very plainly in an introductory chapter, which cannot fail to be of the greatest value to anyone who is desirous of making similar preparations. Criticism on such a work is superfluous. We can only congratulate Dr. Dalton, his assistants, and the publishers on the energy they have shown in undertaking such a work, and the success with which they have overcome a task presenting so many mechanical difficulties. We envy our American *confrères* the authorship and execution of so beautiful and useful an addition to medical literature, and much light is thrown on some obscure relations of parts of the brain which have never before been seen in correct juxtaposition.

ROYAL COLLEGE OF SURGEONS.

THE Committee on Charters and Bye-laws have adopted the following as their fifth report to the Council, viz.:—

The Committee have to report that, having considered the several proposals of the Association of Members of the College, they do not recommend that, as therein suggested, the whole Council be elected every three years; nor that the number of the Council be increased to twenty-five; nor that the Members, as well as the Fellows of the College, should take part in the election.

The Committee have further to report that, in pursuance of the resolution of the Council of the 8th of January last, the President invited delegates from the Association of Fellows to meet the Committee on the 3rd instant, that at the meeting held on that date ten delegates from the Association attended at the College, and that the proposals of the Association and the report thereon of the Committee, dated the 10th of December, 1884, were fully discussed, the delegates stating their reasons for their several recommendations.

From this discussion it appeared that the recommendations of the Association, to which the delegates attached the most importance, were those relating (1) to the constitution, mode of election, and duration of office of the Court of Examiners and Board of Examiners; (2) to the proposal that six instead of three Members of the Council should retire from office annually; (3) to the election of the President by the Fellows instead of by the Council; (4) to the right of meeting by the Fellows and Members without the sanction of the Council; and (5) to the time and mode of making public the minutes of the Council: all of which recommendations the delegates urged upon the Committee with a view to their adoption by the Council, renewing the request, "that no steps should be taken by the Council to obtain a new Charter until the various alterations proposed or accepted by the Council, together with the recommendations of the Association of Fellows, shall have been submitted to a general meeting of Fellows and Members."

The Committee, having fully considered the arguments brought before them by the delegates in favour of the recommendations of the Association of the Fellows, have to report to the Council that they adhere to the conclusions arrived at in their fourth report so far as they relate (1) to the constitution and duration of office of the Court of Examiners and the Board of Examiners; (2) to the duration of office of a Councillor; (3) to the election of President; and (4) to the right of meeting of the Fellows and Members, excepting that in page 8 of such report, in the paragraph respecting the meeting of Fellows and Members, they propose to substitute for the words "*provided that the objects of such meeting be approved by*" the words "*with the consent of*," the Council.

With respect (5) to the publication of the Minutes of the Council, the Committee recommend that, in lieu of the confirmed Minutes being suspended in the hall, as proposed in their fourth report, the Council should revert to the practice formerly in force, in accordance with the following resolution of the Council of the 10th of February, 1870, viz.:—"That the Minutes of each meeting of the Council be posted in the hall of the College within five days of each meeting; those Minutes having previously been submitted to the President or Senior or Junior Vice-President for approval."

The Committee have, in conclusion, to report to the Council that they do not recommend that there should be any delay in submitting to the proper authorities the proposed alterations in the Charter, inasmuch as the several alterations in the Charter proposed by the Council were submitted to a meeting of the Fellows and Members on the 24th of March, 1884, and acceded to at that meeting, and as the only two further alterations in the Charter, subsequently proposed, relating respectively to the qualification of a Fellow for election to the Council and to the mode of nomination of candidates for the Council, have been adopted by the Council in accordance with the proposals of the Association.

March 19th, 1885. T. SPENCER WELLS in the chair.

THE LANCET.

LONDON: SATURDAY, APRIL 18, 1885.

THE lectures which Sir ANDREW CLARK has lately delivered before the Royal College of Physicians were, as was to be expected, couched in well-chosen language and full of closely-reasoned argument. Moreover, they contained clinical and pathological descriptions such as only a close and accurate observer could produce. That they will be widely studied is unquestionable, and the more so from the spice of polemics with which they are seasoned. For from one point of view they constitute a manifesto on the part of the lecturer against the prevailing tendency to regard the phthisical process as owning but one cause—viz., tubercular infection,—in that they bring into prominence the fact that the lung may undergo destruction by invasion of fibroid tissue originating in pleural inflammation. This is the underlying thesis of these Lumleian lectures, and although it may be thought to consist in little more than a restatement of a position which Sir ANDREW long since took up, it receives new significance at the present day, when the true nature of the tubercular virus has apparently been revealed, and for the most part generally accepted. Sir ANDREW CLARK anticipated that his advocacy of such doctrine would meet with much adverse criticism from the modern pathologist; but we fear he is doomed to be disappointed. For even had his position been less powerfully supported by facts than it was, there does not seem *primâ facie* to be any room for objection to the conclusions at which he arrived. Time was when the term "phthisis" included not only tubercular affections, but gangrene, malignant growths, and other destructive lung disease; and the exclusion of such conditions was later followed by the further distinction into tubercular and pneumonic phthisis. It is now generally admitted that the latter classes have the same etiology as the former, the difference being mainly one of chronicity. There still remain such conditions as those to which the lectures were devoted, and if the term phthisis must be retained for them, then there is no reason at all why we should hesitate to admit a tubercular and a non-tubercular phthisis, or, if it be preferred, a bacillary and a non-bacillary form. The only limitation that can rightfully be placed upon such a view is that the alleged non-tubercular character of any given case shall be clearly proved, and that it be not confounded with those undoubted conditions where tubercle undergoes fibrotic change. It would be unsafe to assert that any one of the instances quoted by Sir ANDREW falls under this last-named category, and therefore the question is narrowed to one of the comparative frequency of the two forms of chronic lung disease; that which commences in a simple "primitive" pleurisy, and that which begins with pulmonary tuberculosis, with secondary involvement of the pleura.

The manner in which Sir ANDREW CLARK developed his thesis was well chosen. He commenced by giving details of cases of dry pleurisy, of varying extent and intensity, leading up to cases which, after a number of years, succumbed, and proved to have most extensive pulmonary disorganisation, combined with equally extensive pleural changes. He then discussed at length the morbid anatomy of the process which has such destructive issues. It is somewhat difficult to follow him in the distinctions he lays down between the various forms of the pleural affection, based on a study of the nature of the exuded material. Indeed, one feels disposed to question the propriety of seeking to establish such distinctions; but, grounded as they are upon personal scrutiny, we would not venture to dispute their accuracy. That one form of exudation partakes of a fibrinous, another of a cellular (the term "croupous" is surely inapplicable) character, and that a third deserves to be called "proliferative" is perhaps justified, but the distinctions are often so blurred as to be wanting in those clear outlines which render them suitable for definition. Nor did the lecturer apparently allude to the cases which are obviously tubercular, where the portions of pleural membrane still free from adhesion exhibit undoubted granulations. To be sure, such a condition would have been foreign to his subject, but its recognition should have been allowed. The pulmonary parenchyma is liable to invasion by fibroid tissue spreading along the interlobular septa in the first place, causing thickening of the alveolar walls, peribronchial and perivascular tissue subsequently, and, in fine, so altering both the texture and nutrition of the lung that the organ becomes converted into a dense sclerotic mass, probably permeated by dilated bronchi, or else the seat of excavations, which may have proceeded from bronchiectasis, or been due to local necrosis of tissue from interference with the blood-supply, produced by the fibrotic invasion. The description of the manner in which this disorganisation proceeds, of the resemblance at certain stages to the appearances presented by fibroid tubercle, and of a differentiation of the issue into the fibroid lung, the bronchiectatic lung, and the fibroid phthisical lung, was given by the lecturer with ample detail, and the clinical recognition of such cases was exemplified in the third lecture.

The unilateral character of the affection, its extremely slow progress, the absence of pyrexia or emaciation, and the frequently entire lack of evidence of an inherited taint, coupled of course with the failure to detect bacilli in the sputa, are facts which strikingly differentiate such cases from ordinary tubercular phthisis. That, however, does not preclude the admission of the fact—a fact which comes so materially to dispel the gloom of the ordinary prognosis of phthisis—that tubercular disease may become quiescent, or may initiate fibrotic changes in which itself shares, and, by reason of them, progress with comparative slowness. The truly tubercular are, however, always prone to an outburst of the infection; for many such cases eventually terminate after an illness of a few weeks' duration, by no means sufficient to account for the extensive fibrotic lesions that occur in the lung. It would have been interesting to have learned whether the subjects of pleurogenic phthisis, or of the fibroid lung state resulting from simple pleurisy, ever become the victims of tubercular infection. In such a case the mingling of the characters of the two great factors in phthisis would add greatly to the difficulty of unravelling

the truth. Sir ANDREW CLARK has done good service in so pointedly showing the dependence of this class of case upon antecedent pleurisy; and we think we may go so far as to accept with him the notion that such pleurisy is neither tubercular in itself nor the necessary precursor of pulmonary tubercle. At the same time, the precise discrimination of the two forms of chronic lung disease, and particularly the possibility of tubercular pleurisy eventuating in changes similar to those ascribed by Sir ANDREW to non-tubercular inflammation of the serous membrane, are subjects which may still afford material for further investigation.

As may be inferred from the brief announcement which we made last week, and from the fifth report of the Committee on Charters and Bye-laws, republished in another column of this week's issue, the Council of the College of Surgeons of England has spoken what it would fain believe is the last word anent the alterations to be made in the Charters. The conclusion to which the Council has arrived is that it cordially approves the various alterations which itself initiated with a view of extending its own power, influence, and authority; and it has, after some pressure, expressed a willingness to revert to two Resolutions which it adopted over fifteen years ago—namely, first, to suspend a supervised copy of the Minutes in the hall of the College; and, second, to allow the holding of meetings of Fellows and Members in the College on requisition. It has yielded to the demand that an annual meeting of the Fellows and Members shall be held for the reception of the report of the Council, though it has given no undertaking that the report shall be *discussed;* and it has agreed to accept the proposal that the voting at the election of members of Council may be conducted in person or by voting paper. These, together with a suggestion made by the Association of Fellows, that any Fellow, who has been a Fellow for ten years or a Member for twenty years, shall be eligible for a seat in the Council, are all the material alterations that the Council purposes to introduce into the new Charter.

To those persons who have had actual experience of the inherent repugnance to alteration of any kind exhibited by the executive of all corporate bodies these changes may appear at once numerous and far-reaching. Nor can it be denied that some of them are real and fundamental and big with possibilities. Indeed, their only drawback is that they have come eighty-five years behind their due time; for it is a historical fact that there is scarcely a single important alteration (always excepting those that are strictly autochthonous in the Council), which was not repeatedly advocated by independent persons during the discussions and agitations which immediately preceded the original establishment of the College. But, considerable as the proposed alterations may be, they embrace only a part of the change which persons believe to be indispensable to the growing importance of the College and the professional and academic status of the Fellows and Members. Of this the report of the Committee on Charters and Bye-laws above mentioned contains unmistakable evidence. This report shows:—(1) The Board of Examiners is to remain unreformed; (2) the tenure of office of members of the Council will remain unabridged; (3) the Council will continue to elect the President of the College; and (4) the Members of the College shall have no part in the election of the members of the Council. The meaning of most of this must be sufficiently obvious. Examiners will continue eligible for seats in the Council, so that in the future, as in the past, one-half or more of the executive of the College may be persons who, as examiners, will absorb at least one-half of the ordinary revenue of the College. And as these examiners are elected by the Council, they may, to all intents and purposes, be self-elected; self-elected, that is, each to an emolument of between £400 and £500 per annum. And this happy privilege may be extended, as in the case of a late examiner, to a period of fourteen or fifteen years. A recommendation of the Association of Fellows was intended to render such an abuse of interest, power, and privilege impossible; but the Council, consisting largely of present and past Examiners, has a second time refused to accept it. Equally uncompromising is its rejection of the recommendation made by the Association of Fellows as well as by that of Members, that the tenure of office of members of Council shall be shortened from eight to three or four years. "With regard to any influence of the constituent over the conduct of the representative, there is little difference between a seat in Parliament for seven years and a seat for life," said JUNIUS; and, *mutatis mutandis*, the members of the Council of the Royal College of Surgeons of England are evidently of the same opinion.

Of the evils of leaving the election of President of the College in the hands of the Council it is unnecessary to say more than what has been advanced times without number. The custom of electing the senior member of the Council to the office of President may be a convenient and easy way of making things pleasant, but it is neither dignified nor discriminating. Through lack of courage the Council has more than once placed in the presidential chair a person notoriously unfit.

The Association of Fellows has cause to be dissatisfied with the reception that its recommendations have received. It is hardly likely that the Association will accept the decision of a bare majority of twenty-four Fellows as final. That the Association of *Members* is not disposed quietly to submit is sufficiently evident from the letter signed by its honorary secretaries which appears in another column. A public meeting is to be held in the Westminster Town Hall on May 4th, at 4 P.M., to discuss what further steps may be taken in order to obtain such reforms as are felt to be most urgently needed in the administrative department of the College. There may be, and doubtless are, difficulties in the way of carrying out the programme drawn up by the Association of Members; and the burden of showing how these difficulties may be overcome lies with the Association. But making full allowance for these and other considerations, it is impossible not to feel that the Council has treated the Association of Members somewhat cavalierly.

IN a paper recently communicated to the Society of Medical Officers of Health, Mr. HENRY E. ARMSTRONG of Newcastle-upon-Tyne deals at length with the subject of the status of his fellow-officers throughout the country, a matter to which we also adverted in our issue of the 4th inst.; and Mr. ARMSTRONG's communication may be

taken as a summary of complaints which are very generally felt at the present time. First and foremost, it must be admitted that the position which the medical officer of health holds as regards the tenure of his office is most unsatisfactory; indeed, it is difficult anywhere else in the public service to find its counterpart. Sanitary authorities appoint their town clerks, treasurers, engineers, and surveyors to an office which it is understood they hold during good behaviour; but when it comes to the medical officer of health the appointment is for a limited period, often of one year's duration, and very seldom exceeding five years, and the officer is by this reason alone seriously hampered in his work, for he knows that he will have periodically to seek re-election at the hands of those with whom he is most concerned in his official capacity. It may be said that the difference between the officers referred to and the medical officer of health is due to the circumstance that, in the case of the latter, part payment of his salary is made out of a Parliamentary grant; but, as we have more than once pointed out, the same applies to the Poor-law medical officer, and yet his appointment is not so limited as to necessitate a frequent resort to the tactics involved in securing re-election. That the interests of the public are seriously hindered on account of the anomalous position in which the health officer is placed is a matter of common notoriety, for there are other authorities besides the one referred to by Mr. ARMSTRONG, who seek an officer who will carry out their determination to "do nowt that cost owt, and owt that cost nowt." In short, many an officer whose conscientious performance of his duties has involved some substantial expenditure has had to make way for one or more successors, who have consented at nominal salaries to take his place directly the expiration of his term of office has enabled the authority to replace him. So also, taking the large towns of England, it appears that the several officers of sanitary authorities to whom we have already referred have a maximum salary varying from £1200 to £3000 per annum; whereas the average yearly salary of medical officers of health in the sixteen extra-metropolitan cities and boroughs, having populations of 100,000 and upwards, who give their whole time to their official duties, ranges only from £400 to £900, and this notwithstanding the fact that none of the other appointments involve more preparatory training or a higher legal and scientific qualification than that which properly attaches to the post of officer of health. In other words, it is evident that the position of the officer having charge of the public health compares, in almost every respect, unfavourably with that of other professional public officers.

By way of remedy, Mr. ARMSTRONG proposes that health appointments should be more equalised, small and sparsely populated districts being combined for this purpose; that the Local Government Board should exercise a greater control over appointments made with their sanction; that local authorities should be made to learn that they cannot with impunity ignore the sound advice of their health officers; that the authority of the officer of health should be extended, and especially that he should always have a direct control over inspectors of nuisances; that the recompense and prospects of the officer of health should be improved; and lastly, that his tenure of office should be placed on a more satisfactory footing. Some of the details embodied in Mr. ARMSTRONG'S suggestions may be open to criticism, but the conclusions he arrives at are sound; and it is certain that unless the position of officers of health is soon placed on a different footing, it will be found that really skilled medical practitioners will not care to devote their time and energies to a branch of the profession from which they run the risk of being ejected whenever they perform their duties fearlessly and properly, and in which the salaries offered rarely compensate for the difficulties they have to contend with, and never make up for the want of security as regards tenure of office.

DURING the last quarter of a century the relations subsisting between families and their ordinary medical attendants have been growing less and less intimate. There was a time well within the remembrance of men still in active practice when no act of discourtesy to the family doctor would have been regarded as more marked than for any member of a household he attended to seek another opinion, or, as it is commonly called, "further advice," without first giving an intimation of the desire to the family attendant. The question as to who the consultant should be was decided by mutual agreement. It was not an uncommon rule for a family to settle on their consulting physician or surgeon once for all, and their relations became only second in intimacy to those held by the family doctor. A feeling of friendship and of mutual trust grew up very naturally between consultants and family practitioners under these circumstances, conducive alike to the welfare of patients and the comfort of their professional advisers. But all this is now changed. The members of a family feel themselves at liberty to consult whom they please, with or without the consent of their family attendant; nor are patients content with one opinion, but frequently seek one after another, obtaining what seems to the patient "a difference of opinion" in every instance, and often making a simple case appear a complication. Distrust of the judgment of the profession results. Instances occur of several opinions, each irrespective of the others, being obtained in this way. All this is much to be regretted, not as destructive to pleasant and useful professional relations alone, but in the interest of patients.

For the bringing about of these undesirable changes the consultant is chiefly responsible, though some of the blame must lie with the patient. There was a time when the consulting physician or surgeon would have regarded it as unbecoming his dignity to lend himself to any system which embodied discourtesy to a professional brother, and when he would have shrunk from aiding a course which in many instances enables a patient to seek his own injury under the delusion that he is finding the best means of relief. It is not uncommon for the consultant to be separated from the patient by long distances, which render frequent interviews impossible. A prescription is given, and general directions; but the patient as a rule depends on the former, which, if it gives relief, often travels the round of his friends supposed to be similarly affected, though a few hours after being written the prescription may cease to be well adapted to the case, and in some instances even hurtful. It is well worthy of the consideration of consultants and patients whether

a system so mischievous should not be abandoned. That it should be discouraged by the profession there can be no doubt, and each member should consider how this discouragement can best be given. Patients are free to seek the opinion of any medical man, but medical men who are not the regular attendants of the family should hold themselves equally free not to give this opinion, except in conjunction with or through the regular attendant of the family. Much heart-burning would be saved to doctors, and distress to patients, if this rule were more generally observed. It may not at all times be easy to refuse to advise when the patient has determined to seek what he regards as an unprejudiced opinion on his case. Under such circumstances the patient should be made to understand that an opinion thus given is not to be regarded as conclusive, but defective, in so far as it is not based on a knowledge of the family history, without which many a case must remain obscure. No diagnosis which ignores the family and personal history of the patient can be regarded as satisfactory, and this history as a rule can be best supplied by the family attendant; it is a factor in diagnosis which often enables a family practitioner to arrive at a right conclusion, when the highest talent and learning might be at fault.

The consulting surgeon or physician of the past is gradually merging into a specialist, and this fact has had something to do with these altered relations of practitioner, consultant, and patient. While specialism is a road to popularity and fortune, there is no prospect of its being abandoned; nor, while rightly used, is it desirable that it should be. But in proportion as a medical man's experience of a single disease and knowledge thereof increases, so his acquaintance with disease as a whole is liable to suffer diminution. Hence the greater need of the interposition of a family attendant between the patient and the specialist, for there are points for consideration besides those directly bearing on the cure of the localised disease, on which the specialist is too apt to concentrate all his attention, often to the disadvantage of the patient.

In country districts, where the advice of another general practitioner in the adjacent town is sought without the knowledge of the family attendant (if the fact oozes out, as is most likely), the relations between the two medical men are apt to become very strained, as well as those between the family practitioner and the family. If the town practitioner aspires to the position of consultant among his country brethren, he will need under such circumstances considerable tact. He will desire to avoid offence to a family, it may be of local distinction, whose good opinion he may wish to maintain. He may have to choose between offending a family whose friendliness is of importance to him, or a fellow practitioner. Yet his course is a plain one. He should endeavour by all means in his power to bring about a consultation between himself and his country neighbour, who has acted as the family attendant, in which attempt, if he is in earnest, he will seldom fail.

ADVERTISEMENT of a certain kind and degree is as essential to professional work as to trade. The mere presence of a professional man in any neighbourhood where he is known as such is an actual guide to those who may require his services. The most modest literal indication of a practised calling, even on the hall-door of a practitioner, is advertisement, though of a severely classic dignity. So much is necessary for recognition. A mark of some sort belongs to every office. Every order of society has a descriptive term allotted to it. Indeed, a more austere abstemiousness in the use of titles would lead to great public inconvenience, particularly in the case of our own calling, in which emergencies are common, and the best physician for the time being is often the one who can first be found. Let us, however, cross the line of necessary convenience and begin to expatiate in the language of recommendation, of advertisement properly so called, and we enter at once upon doubtful ground. Leaving the terms of plain proposal, we begin to traffic with popular fancy, and we take up a position which, never noble, is most unworthy of those who apply a teaching which has any claim to general acceptation. The difference between self-advancement in an honourable and a dishonourable sense is, therefore, a difference of degree. It is not on that account the less real. But where does fault begin? A certain reputation, over and above the mere working badge, belongs to each one in proportion to his ability and attainments. Is this to be demurely shadowed, or is it to be publicly set forth? We may say, in answer to this question, that so much prestige as naturally grows out of personal effort, without any attempt on the part of the person most interested to force its growth, is justifiable. Thus the publication of researches among fellow investigators is a fair reward of labour. The spontaneous recommendation of benefited patients is likewise a legitimate advantage. To parade the merit of the discovery, or of the applied skill, before the public eye in order to promote a private gain would be to make that gain the chief professional ambition, and would not be justifiable.

We may profitably compare the conduct of gentlemen in legal practice with that of our medical brethren in this matter, and also consider some of the inducements which are apt to influence the views of one or the other class with regard to it. We are probably right in saying that the great majority of the members of both professions are equally opposed to advertisement in its ordinary and offensive sense. Probably also the legal profession as a whole is less open to reproach on this head than our own. There is less emergency and urgency in legal than in medical work; litigants are usually content to occupy some time in selecting a good lawyer. Minutes or hours do not often mean life or death in the business for which they seek him. This may account for the absence of any signs equivalent to the private dispensary, open surgery, or the familiar beacon light of medicine about the house of the practising solicitor. Medical emergencies do not, we think, require the use of all this pretension; but we can imagine that some practitioners have been misled by thinking that they do. Advertisement by means of a circulated card, or of a door-plate or slab of sensational size and covered with credential titles, hours of consultation, &c., is another objectionable method. This practice is not unusual among members of both professions at the start or even in the later progress of their independent career. We admit that it is, on the whole, exceptional, as is fortunately the still

less excusable custom of systematic touting by means of agents—a custom, we believe, more common among the lower strata of legal practice than among those of the healing art. Heartily as we oppose these and all kindred methods of advertisement, we cannot but think that the temptation to resort to them is stronger in the case of our younger and poorer medical brethren than of the votaries of the law. We are comparatively straitened, for example, in the matter of remunerative appointments. The greater number of public offices with us are gratuitous. This cannot be said of lawyers. The fees of general practice, again, do not bear nearly the same ratio of emolument to the work done as do the charges of legal procedure. We are, moreover, expected in the name of common humanity to render many services as matter of charity even in our private medical capacity, and to some extent this is unavoidable. Resort to law courts to recover fees is, in the case of medical men, fraught with serious drawbacks, quite apart from the trouble and loss of time which they directly cause, while costs for the lawyer are part of the assignment of every verdict, and the assignment implies neither trouble nor loss of professional dignity. These various circumstances must greatly discount the value of medical work, and intensify the tendency to place considerations of pocket before those of duty and honour. We earnestly press upon all who are subject to such temptations as we have indicated, and first of all upon the younger members of our own body, to rely notwithstanding upon the regular methods of practice, even at the risk of early difficulties, since there is no other road so sure to final professional success and satisfaction.

Annotations.

"Ne quid nimis."

THE M.D. AND M.S. DEGREES OF THE LONDON UNIVERSITY.

AT the last meeting of the Senate of the University of London it was resolved, on the recommendation of the Conjoint Committee on Examinations, that "the subjects of Logic and Psychology should be withdrawn from the syllabus of the M.D. and M.S. Examinations, and that in lieu thereof questions should be substituted in Mental Physiology, especially in its relation to Mental Disorder." This formal withdrawal of such an obsolete mental gymnastic as Formal Logic will be so far satisfactory to candidates for the M.D. and M.S. degrees; but the real difficulty has always been to understand what is included in the term "Psychology." It is quite certain that different examiners have given a special significance to the term. We wish very much that "Mental Physiology, especially in its relations to Mental Disorder," were more closely defined, as we foresee the former difficulty arising under the new regulation. The Physiology of the Brain is within the range of the syllabus of the Intermediate M.B.; the treatment of its diseases is included in the Final M.B. Examination. We could have wished that so-called Psychology, which rests on no scientific basis whatever, and is only inferential from beginning to end, had been simply withdrawn, and that no such palpable compromise as the present regulation had been put in its stead; for it must always remain to the candidate that fatal possibility—an unknown quantity.

PUBLIC HEALTH (MEMBERS AND OFFICERS) BILL.

UNDER Section 193 of the Public Health Act, 1875, it is enacted that officers or servants of local authorities shall not be in any way concerned or interested in any bargain or contract made by those authorities, and this under pain of penalty and at the risk of being held hereafter incapable of holding office. This clause is found to act in certain instances with unnecessary severity, and hence a Bill, which bears the names of Sir John Kennaway, Mr. Long, and Mr. Cowen, has been brought in for the purpose of enabling officers and servants to be interested in contracts with local authorities as to the sale, purchase, leasing, or hiring of lands, rooms, or offices, and also as regards the insertion of advertisements in newspapers in which they are interested, provided the consent of two-thirds of the number of members of the local authority present at a meeting held seven days after a notice stating the nature of the contract has been sent to every member of that authority has been obtained. Another clause makes it unnecessary for any member of an authority to vacate his seat by reason of his having a share or interest in any papers in which advertisements relating to the business of the authority have been inserted. So far as advertisements are concerned, the Bill is unquestionably needed; and as to the other matters referred to, the precautions which will be necessary seem ample to cover any possible irregularities.

METROPOLITAN LOCAL DEATH-RATES.

THE disturbing influence of deaths in public institutions causes considerable difficulty in the calculation of trustworthy local death-rates in the metropolis. It is only a year or two since the insertion in the death register of the previous residence in entries relating to deaths in institutions first rendered possible the distribution of these deaths to the sanitary districts to which they belong. The last Weekly Return gives for the first time a table showing the corrected mortality in Registration London and in its thirty-nine sanitary areas. The period embraced by this return is the thirteen weeks ending the 4th inst. It is well known that in most large towns certain numbers of deaths of non-residents are recorded, but it has been held that these deaths are balanced by those of residents recorded outside. The new table given by the Registrar-General corroborates the trustworthiness of this assumption. The result of the correction of the recorded deaths in Registration London is to add 192 deaths of London residents recorded in the metropolitan asylum hospitals situated outside London, and to exclude 281 deaths of non-residents registered inside London. There can be very little doubt that if the deaths in the county lunatic asylums and in the metropolitan asylums for imbeciles at Leavesden, Caterham, and Darenth were also brought into account, the deaths of residents outside would fully balance those of non-residents inside. The corrected death-rate for the whole of London last quarter therefore differs but slightly from the uncorrected rate—it was 21·5 instead of 21·6 per 1000. This correction, however, leaves out of account the disturbing influence of an unknown number of deaths of domestic servants, shop assistants, and other town immigrants, who, when health fails, return to their country homes, where their deaths in many instances are recorded, although undoubtedly due to the effect of town residence. No attempt is made by the Registrar-General to calculate the death-rate in each of the thirty-nine sanitary areas within Registration London. This is probably due to difficulties in the way of satisfactorily estimating the present population of these areas. In the remarks on the table, however, the death-rates during last quarter in the five groups of registration districts are given as 19·4 in the West, 20·4 in the North, 20·8 in the South,

23·8 in the East, and 29·0 in the Central. These variations in the death-rates give useful indications of the principal slum localities of the metropolis. On the assumption that the increase of population since 1881 has been maintained at the same rate that prevailed between 1871 and 1881, it may be calculated that the death-rate in the first quarter of this year ranged from 27 to 31 per 1000 in St. Giles's, Holborn, St. Luke's, St. George's-in-the-East, Stepney, St. Saviour's (Southwark), and St. George's (Southwark). The death-rates from the principal zymotic diseases ranged from 1·52 per 1000 in the West, to 2·49 and 2·95 in the Central and East groups of districts. The rate from scarlet fever, which averaged 0·18 in London, was equal to 0·56 in East London, and was nearly six times as great as in the four other groups. It is also stated that 4 of the 7 deaths from typhus belonged to East London. These statistics call for the earnest consideration, not only of the metropolitan sanitary authorities, but also of all those interested in the health and social condition of the population of London.

"WIND AND WEATHER PERMITTING."

THIS condition, painfully familiar to the last generation of travellers by sea, but almost forgotten since the days of steam-power afloat, ought to be adopted as a general provision by all who are not of the very strongest and healthiest type of humanity, in respect to out-door engagements at this most trying season of the year, more particularly in London and other large cities. A glance at the obituary column in any leading newspaper will suffice to prove that the risks of life, especially to the weakly and the aged, just now are out of all proportion to the apparent natural vicissitudes of the Spring. The truth is, that the changes of *personal* temperature are so sudden and severe that few constitutions can suffer them with impunity. What we mean by personal temperature is this: The atmosphere generally may, as shown by the thermometer, be fairly mild, or at least not remarkably cold, but owing to the strong currents of icy wind which rush through doors and under archways, out of courts and alleys, round corners and across main thoroughfares from side streets, a pedestrian not able to bear being almost instantaneously deprived of a large proportion of his caloric, and endowed with such vigorous powers of heat-production as to be able to compensate for the loss with extraordinary rapidity, must in a walk of very short duration be thoroughly chilled. Take, for example, any ordinary main street in London of some quarter or third of a mile in length. It will probably have fifteen or twenty side streets on each side; so that, unless the wind chance to blow parallel with the main thoroughfare, a person walking through it will encounter, say in twenty minutes, fifteen or twenty blasts of cold air, which will catch him suddenly. Each of these blasts will do two things to him. First, it will rapidly take from his body as much heat as can be abstracted in the period occupied in crossing the side street, which is considerable; and, secondly, it will give an appreciable depressing shock to the nerve centres through the nerves of the skin. These fifteen or twenty successive abstractions of heat and nervous depressions, following each other at intervals of a minute or a little over, will produce an aggregate impression on the vital state—that is, the heat and the energy of the organism together—at the end of the twenty minutes, which cannot fail to be felt by a weakly or susceptible person. There is no time to recover between the attacks. When a man takes his bath in the morning he gets a reaction following the depression of the chill; but if he no sooner got out of one bath than he plunged into another, instead of benefiting his health, the "tubbing" would do him harm. It is far worse for the pedestrian to walk along such a main thoroughfare as we have supposed than it would be for him to walk on a cliff exposed to the steady blow of the same wind. The organism can much more readily accommodate itself to a prolonged low temperature, if it be not a crippling cold, than it can sustain without injury a rapid succession of little chills and shocks. These are like the rain of knock-down blows that exhausts the boxer. He has no time "to get breath" between the attacks of his opponent. We have not exaggerated this matter, and we venture to think it is one which the dwellers in cities, and particularly those who pass the earlier weeks of the season in London, will do wisely to bear in mind. It is often difficult to tell how a "cold" has been "caught"; but this we know too well, that what seem to be very slight colds are often productive of the most serious results. It is not heroic, but rash, to risk taking cold. The most robust and apparently the strongest may succumb to the consequences of such an attack. Healthy and hardy country folk, and even mountaineers who "live in the open," frequently take cold in London or some large city. It is the fusilade of deadly little chills they cannot bear. No one need feel humiliated in taking precaution against the strangely harassing attack which the enemy is wont to make on our vital forces in Spring, and particularly in April and May.

TOLERANCE AND ADVANTAGE OF LARGE DOSES OF POTASSIUM IODIDE.

DR. HUTCHINSON of Chicago, in the New York *Medical Record*, details a case in which he had given large doses of iodide of potassium with a curative effect. The case was one of a woman, aged fifty-four, married for the second time, with three children by the first husband and one by the second, all healthy, and with no history of syphilis. The disease from which she had suffered for twelve years was abscesses on the legs, over the tibia, and on the chest, over the sternum. They were slow and very painful in their course, being months in opening, while months elapsed before the sinuses closed. They left numerous and depressed scars. At the time of consulting Dr. Hutchinson the patient had two ulcers on the forehead, and one *cold* abscess on the arm. Tonics having failed, and there being great pain on pressure over the shins, the patient was put on iodide of potassium, eight grains three times a day, till she took thirty grains three times a day. An average quantity of one drachm a day was taken for four months, with the effect of a cure. Tonics were afterwards given. There is a suspicious suggestion of a specific factor in this case, both in its symptoms and its therapeutics. The iodide was not only well borne, but the patient's appetite improved, and she rapidly regained flesh and strength, as often happens to patients in whom mercury acts curatively.

THE CONVICT BRIGGS.

WE are glad to find that after mature consideration the Home Secretary has advised Her Majesty to remit the remaining portion of the sentence of twenty years passed on the prisoner Briggs. This is only justice; for, as we pointed out in November, 1884, the medical evidence, as reported, was not consistent with the teachings of scientific knowledge; and, apart from this, it has transpired that the prisoner was in all probability physically incapable of forcibly withholding food from the deceased. We do not advocate the wholesale remission of punishment; no one will be found more loyal in the support of justice equitably dispensed than ourselves; but the above was evidently an instance for the exercise of the clemency of the Crown. It is to be hoped that Sir W. Harcourt will see his way to investigate, and that early, the case of Dr. Bradley, for if ever a prisoner merited the benefit of the doubt it was the latter.

THE LATE LORD MAYOR.

WE learn that the late Lord Mayor had suffered for some years from diabetes. On Easter Monday he caught cold whilst supporting the Mayor of Brighton in his official capacity at the review on Brighton Downs. An attack of pleurisy supervened, but the fatal termination was caused by diabetic coma. Although so well recognised by the profession, it is hardly known beyond it on how fragile a thread a man's life depends when he is suffering from diabetes, even though the disease is not apparently progressive. The amount of sugar excreted may be stationary or even diminishing under medical and dietetic treatment, and yet by the slightest accident the balance may be destroyed and death rapidly result. A few weeks ago a bicycle accident of no very great severity caused the death of a diabetic patient; and here an attack of pleurisy, apparently also of an ordinary character, has determined the death of the Lord Mayor, not from the inflammation, but from diabetic coma. Cases in which the onset of blood-poisoning from a scratch on the hand, and infection by the acute exanthemata, have led to the death of diabetics almost before the diseases have had time to declare themselves are also not uncommon, and show what excessive care is necessary for the preservation of life against accident when a person is suffering from permanent glycosuria.

MICRO-ORGANISMS OF RHINO-SCLEROMA.

THE existence of micro-organisms in rhino-scleroma has been denied by Fritsch, Pellizari, Chiari, and others. M. Cornil has examined with M. Alvarez a certain number of specimens of the disease in question, and they have not once failed to find bacteria having a peculiar form, and presenting a well-defined capsule. The bacilli are short rods, having a length of from about two to three thousandths of a millimetre, and about ·4 to ·5 μ in diameter. Spore-like bodies have been seen in the interior of the little rods. The micro-organisms may appear in the form of regular ovoids, of which the periphery is formed by a well-defined capsule. In the centre of this capsule the little rod is seen either as a homogeneous and smooth structure or else formed by two, three, or four round or ovoid granules. A clear line always exists around the bacillus. The capsule is formed of a hard structureless colloid material. The bacteria may unite in pairs by fusion of their capsules. Many of the bacilli were observed to be free in the tissues, being situate between the fibrils of the reticulum, around the large cells, in the spaces of the reticulum, or in the lymphatic vessels of the superficial or deep parts of the skin.

THE WESTMINSTER UNION.

THE guardians of the Westminster Union who supported Mr. Bliss, the ex-master of the workhouse, in those irregularities which eventually deprived him of his appointment, undeterred by their rejection last year *en bloc*, again attempted at the last election to regain office. They were, however, rejected by an overwhelming majority of the ratepayers, whose public spirit, in polling so heavily as they did to prevent the return of the old members who on the last occasion of their holding office failed in so marked a degree to justify the trust reposed in them, cannot be too highly commended. At the last meeting of the Board of Guardians previous to the election, the following resolution was passed:—"That the best thanks of the Board be and are hereby accorded to Dr. Joseph Rogers, the medical officer of the workhouse, for the zeal and ability with which he has discharged the duties of his office during the past year, and for the confidence which the guardians have therefore been able to repose in him, and which they trust he will continue to deserve from their successors."

RESECTION OF CLAVICLE FOR SARCOMA.

AN interesting surgical case has been placed on record by M. Polaillon. The patient was a girl aged sixteen, in whom a swelling of the outer end of the right clavicle was first noticed eighteen months ago, and had gradually increased in size. There was not much interference with the movements of the arm, and but little pain. The tumour was about the size of the fist, of bony consistence, and lobulated in outline. The skin over it was normal. There were no signs of compression of the brachial nerves or vessels. The lymphatic glands were healthy. Careful examination showed that the tumour did not pass beyond the limits of the expanded clavicle in any direction. The operation was performed on Jan. 29th under the spray. A horseshoe-shaped incision was made through the soft tissues, and the flap turned inwards, its base being at the neck of the patient; the clavicle was cut through at the insertion of the sterno-mastoid in the inner third of the bone, and then disarticulated at its outer extremity. In order to isolate the tumour the fibres of the trapezius and deltoid were cut through at their insertion into the clavicle. Antiseptic dressings were applied. The patient did well, and left the hospital six weeks after the operation. There was but little deformity, and the movements of the arm were perfectly preserved.

POOR-LAW MEDICAL RELIEF IN BIRMINGHAM.

AN inquest in the Birmingham coroner's court on the 9th inst. resulted in a verdict of "Death from natural causes," with a rider affirming that the medical officer's conduct was very censurable. The facts lay in a small compass, and were substantially agreed upon. A poor man, aged forty-three, had suffered from bronchitis for three weeks, when, on March 28th, his son, aged fourteen, went to the parish offices and obtained an order from the relieving officer. The surgeon saw the patient the same evening, and several times afterwards, giving orders for medicine, which was duly supplied. But the poor man's circumstances were most wretched. His children having, according to report, deserted him, there was no one to attend to him; there was only a handful of fire in the grate, and some bags of flour did duty for a bed. In this state of things the medical officer strongly, and repeatedly, advised the patient's removal to the parish infirmary; but the advice was unheeded, until Saturday morning, the 4th inst., when deceased's brother called at the medical consulting-room in the parish offices, and obtained an order for removal from the surgeon, who signed it, though it appears he had not seen the patient for two days. The removal was effected with a plentiful supply of blankets, in a car-ambulance, and no one questioned that, on the patient's arrival at the infirmary, every possible attention was paid to him; but he did not survive many hours. The particular case derives special importance, from the exceptional circumstances in which Poor-law medical relief has for some time been administered in Birmingham. The infirmary at the workhouse is, by common consent, well regulated. The staff of resident doctors and nurses is good; cases of exceptional gravity are placed under the care of Dr. C. W. Suckling, one of the honorary physicians to the Queen's Hospital, and his recommendations are very liberally acted upon by the guardians. But the out-door medical relief has for many months been in an unsatisfactory state. An inquiry by the Local Government Board, during the summer of 1884, resulted in the resignation of the four medical officers, who had for several years ministered to the poor in the extensive parish of Birmingham. Projects of reform became the order of the day; but, pending their discussion, temporary medical officers were appointed, subject to a month's notice. Several at least of these

gentlemen have done their work in an unimpeachable manner; but the conditions of the permanent appointments are yet undetermined. The delay in effecting the reforms, which everyone admits are urgently called for, is supposed to be due to some differences on administrative details between the Poor-law authorities in London and Birmingham. This is a state of things demanding immediate attention. The present Board of guardians in Birmingham may plead indulgence, as they have only been just appointed. But though that be true collectively, they are individually, for the most part, old guardians. Their chairman has a very large acquaintance with Poor-law medical relief, and the Inspector for the district is one of the ablest and most humane officials in the service. The case seems one for inverting Talleyrand's famous maxim—"Above all, some zeal, gentlemen," and the work may be done soon and well. The cause we plead is no other than that of thousands of sick and helpless poor.

PTOMAINES IN CHOLERA.

AN original article contributed to the *Journal de Pharmacie et de Chimie*, by M. Villiers, gives an account of some investigations on the presence of alkaloids in the tissues of fatal cases of cholera. The tissues studied were the kidneys, intestines, liver, and the blood in the heart. The method of extracting the alkaloid was that of Stas. The alkaloid was obtained in fair quantity from the intestines, some traces were separated from the kidneys, but the liver and blood contained almost none. The alkaloid is liquid, possesses an acrid taste and has the odour of fresh hawthorn. It had the alkaline reaction, and its base could not be displaced by the alkaline bicarbonates. Iodide of mercury and potash causes a white precipitate in its solutions or those of its salts. Iodised iodide of potassium gives a brown precipitate even in very dilute solutions. Bromine water, picric acid, chloride of gold, tannin, and bichloride of mercury give precipitates, but chloride of platinum and bichromate of potassium do not. Pure sulphuric acid develops a slight and fugacious violet colouration. The hydrochlorate of the alkaloid is neutral in reaction, crystallises in long fine needles, and is extremely deliquescent. The physiological effects in frogs were ill defined; in guinea-pigs very marked, and consisted of remarkable periodic variations in the frequency of the cardiac pulsations; the anterior limbs were remarkably convulsed three-quarters of an hour after the injection, and afterwards the posterior limbs were affected in a similar manner; the convulsions passed away, and the animal remained ill and died in four days. After death there were found subpleural ecchymoses; the heart was dilated and full of liquid blood; the brain was a little congested. M. Villiers believes that the alkaloid is formed in the intestines and excreted by the kidneys.

THE CHELTENHAM APPOINTMENT OF MEDICAL OFFICER OF HEALTH.

WE have received several communications relating to the recent proceedings for the appointment of medical officer of health for the Borough of Cheltenham; and one which has just reached us from a disappointed candidate, and which is supplemented by accounts of the proceedings of the Town Council, places the whole matter before us. The election was to be made subject to the Order of the Local Government Board, which body requires that, unless it shall specially so decide, the candidate chosen shall be a fully qualified medical practitioner. The Cheltenham appointment had been held by a distinguished physician, and some thirty-five candidates sought to occupy the position which had been so ably filled by the late Dr. Wright, F.R.S. The candidates included practitioners of high and recognised standing, and men of scientific training, some of whom possessed certificates in hygiene; but amongst them was one who had a single qualification only, and he, though apparently a resident in Cheltenham, is stated not even to have been known to some of the medical profession of the town. This one candidate, therefore, failed to comply with the terms on which the advertisement declared that the appointment was to be made. But instead of his name being at once erased on the ground that he was disqualified, the corporation literally passed by all the qualified candidates and elected the only disqualified one amongst them. Then came the question as to the legality of his election on the ground of his possessing a single qualification only; but before this could be dealt with the candidate in question goes somewhere or other, and comes back within a few days fully fledged in so far as qualification is concerned. Now, the corporation submit that the man of their choice fully complies with the terms of the Order of the Local Government Board, and, according to an answer given by the Parliamentary Secretary of the Local Government Board in the House of Commons, this view is likely to be accepted by the Board. But another question is now being raised in the Town Council itself. Even if the Local Government Board choose to accept a qualification obtained after the election, and one the value of which can best be judged of by the circumstances under which it is procured, yet it is by no means clear that an election made subject to an advertisement which called for a duly qualified practitioner can be valid when the choice of the electing body falls upon a candidate who is not duly qualified, and this in the presence of a number of duly qualified candidates who had presented themselves for election. Mr. Onley, a member of the Town Council, has raised this point, and some at least of the rejected candidates intend to do the same. The question is one of extreme importance, for the Cheltenham election will form a precedent which is not likely to be forgotten, and we should like in the first instance to see it brought under the notice of the President of the Board, with a view of eliciting his official opinion on the subject. When that has been procured, the thirty-four duly qualified candidates who were passed by will know precisely how they stand with regard to future action.

HEREDITY AND TUMOURS OF THE EYE.

IN the *Revista Argentina de Ciencias Médicas*, a Buenos Ayres periodical, the typography and general "get up" of which we feel bound to say puts to shame most of the European medical monthlies, Dr. Juan Alba Carreras describes a case of cellular sarcoma of the choroid in a girl aged three years. An enormous eye protruded from the orbit, hard as an ivory ball, the pupil reaching to the edge of the cornea. The ocular conjunctiva was covered with numerous tortuous vessels, indicating great obstruction to circulation. The lens was quite opaque, and of a yellowish colour. There were severe shooting pains on the side of the head. After enucleation, a sarcoma of the choroid was found, of the size of a walnut, which had ruptured the sclerotic near the optic nerve, the sheath of which was two centimetres in thickness, and, instead of nervous tissue, contained only a white granular substance. The patient, though treated with antiseptic precautions, died of meningitis on the seventh day. As the question of the influence of heredity on ocular tumours had been raised, the relatives were examined. The father had a double external strabismus, caused by a coloboma of triangular shape, situated on the inferior and external aspect of each eye. In the brother, aged seven, was found in the left eye a dilated insensitive pupil and a detached retina, with complete loss of vision; the right eye being normal,

with the exception of some increase of tension. This child had received a blow in the left orbital region two months before, and for the last fortnight the parents had noticed that the fundus appeared white. The diagnosis was that a similar tumour existed to that from which the sister had suffered, and immediate enucleation was advised, which was refused, as, indeed, it had been when the other child was first seen. The conclusions drawn from this case are: 1. That predisposition to ocular tumours may be inherited, though in this instance the father's eyes have, up to the present time, shown no signs of malignant growth. 2. That coloboma in parents may serve to assist the diagnosis of a tumour in the fundus. 3. That there are conditions which serve to distinguish these tumours. 4. That it is necessary to insist on enucleation as soon as the existence of a tumour is recognised. If this had been permitted in this case, the extensive propagation along the optic nerve, which here existed, and which was doubtless the cause of death, would not have taken place.

VETERINARIANS AND FOOD INSPECTION.

THE veterinary surgeons of the province of Cordova having complained to the Spanish Royal Council of Health that the local authorities had appointed as inspectors of food two medical men, instead of members of their own body, whom they considered best fitted for such duties, the Royal Council replied that there was no doubt that veterinarians ought to be appointed to inspect meat, but that there was no law, and not even a uniformity of custom, concerning the appointment of inspectors of other articles of food. It was, however, a subject which ought to be settled, and therefore the Council resolved to advise the Government to make the following regulations:—(1) That the inspection of warm-blooded animals, alive or dead, fresh or preserved, should be exclusively in the hands of veterinarians; (2) that the inspection of all other articles of food sold in markets, including cold-blooded animals, should be committed indiscriminately to medical men or to pharmacists; (3) that both classes of inspectors be irremovable from their posts, except for grave cause. The Royal assent was given to the above-mentioned recommendations, which have just appeared in the *Official Gazette*.

AN ORTHOPÆDIC MARCH PAST.

GREATER triumphs than the artificial legs and arms invented by the Count de Beaufort civilisation has few to boast of. These limbs, at once thoroughly efficient and comparatively inexpensive, have been judiciously doled out by the "Assistance aux Mutilés pauvres," of which the Count is secretary, till not in Paris only, but throughout France, the soldier who in war, or the artisan who in work, has lost either extremity or both might now be mustered in their thousands to attest the blessings vouchsafed them by the rehabilitating invention. From France the charity has been extended to Italy, thanks to General H. H. Maxwell, C.B., R.A., who, wintering in Rome or *en route* through the Italian provinces, has now these six years been conferring the Beaufort limb on "deserving objects" with signal success. His experience, embodied in six reports addressed to those subscribing to the charity, has fairly and fully established the following:—1st, that the Beaufort leg, with its curved, solid, false foot, with which a man can walk like a carter for sixteen miles a day, is vastly more useful than any mere "peg-leg"; and, 2nd, that in many cases a Beaufort hand, with the fingers stiff and a spring thumb, is more serviceable than a mere hook, [enabling its possessor to perform good penmanship, to pick up anything seizable, to hold knife and fork, to play chess, and, indeed, to do all the work of many a natural hand. Like all charities, that of the "Legs and Arms" must, however, be administered with circumspection. To quote the General (whose reports, by-the-way, always racy in style, are often romantic in interest):—"Giving a penny to a beggar, a shilling to a poor-box, or a cheque to a society are forms of charity which everyone more or less practises. Strong doubts, however, are apt to assail you at times as to whether you have done your alms in the most judicious way. You may have done right, and, with equal uncertainty, you may have done wrong. This state of mind paralyses your will to pull out your purse. But if you find a man with a wooden pin-leg sitting down breaking stones by the roadside; if the railway navvy or station porter has had his foot amputated, and you find him in hospital thinking of how he is to earn bread for himself and perhaps his wife and children; if, again, alongside of him there is a workman who has lost his hand, crushed by machinery or shattered by explosion,—in all such cases there is no reason for hesitation. You *must* be right in taking out pencil and paper and making notes of the case if you have time to spare; if not, in giving the sufferer your card. If you have not the necessary money yourself, it is to be had for the asking of others who are more fortunate." The General's practice has been to get the man into his own house after he has been completely cured and his stump and limbs have recovered their normal size, to measure him according to Count Beaufort's directions, which he reprints at the end of his first report, and to send these measurements to M. Werber of Paris (orthopædist to the "Assistance aux Mutilés pauvres"), who will promptly and for a very small sum confer on the amputated sufferer the means of earning his bread. What M. Werber has done so well is now equally performed by our own "Provident Surgical Appliance Society for the Relief of the Crippled Poor," which also takes orders for the Beaufort limb; while other great centres of population, not less than Paris, Rome, and London, will ere long be equipped with similarly appointed charities. In a country like Italy, where mendicancy has become an "institution," if not indeed one of the fine arts, General Maxwell's movement bids fair to fructify most beneficially; and in the files of rehabilitated and breadwinning cripples mobilised in his successive reports we congratulate him on a peculiarly efficient, not to say touching, "march past."

IRREGULAR PRACTICE IN CAPE COLONY.

THE great problem of ignorant and illegal practice is greater in remote and ill-provided districts than in settled countries and large towns. There are parts of Norway where people live thirty miles from the nearest surgeon. It must be still worse in many other countries, where educated advice and proper medicines are a luxury of the rich, and the great epochs of sickness and labour, and even the great event of death, have to be faced without the assistance or the amenities of medicine. Worse than the mere absence of medical ministration occurs in such countries. The quack and the pretender take the place of, and assume more than the airs of, the regular practitioner, and often gravely add to the danger of the disease. A case in point is before us. At the Uitenhage Circuit Court (Cape Colony), Adolph Frankenburg has been tried for culpable homicide, or for contravention of the medical ordinance. The facts are that he, having no legal authorisation to practise, administered medicines to Joseph Blommetje of Vervolf, a strong, hearty man, suffering from erysipelas, and that he introduced into the eye certain highly irritating drops, after which the "apple of the eye dropped out," and the patient languished and died. Dr. Arthur Vanes was of opinion that the patient's death was caused by the treatment. The prisoner had been previously convicted. The judge, finding him guilty on the second count, inflicted a fine of £50, and

was especially severe on the accused for venturing to treat so delicate an organ as the eye. Like other irregular practitioners, he took large fees from his dupes, to whom of course he promised a cure. The hardship is that at the Cape, as elsewhere, the chief odium of exposing the mischief worked by such characters as Frankenburg devolves on the medical practitioner who is called to see the victims. No good will be done till the law devolves on some public officer the duty of punishing illegal and ignorant practice.

MERCURIC CHLORIDE AS A DISINFECTANT.

DR. GEORGE M. STERNBERG, in his recent reports to the American Public Health Association, confirms the opinion arrived at of late years in more than one quarter as to the very powerful antiseptic action of perchloride of mercury. He relates experiments in proof of the inhibiting action of very dilute solutions upon the development of the bacilli of anthrax and other micro-organisms, and sums up his conclusions thus:—

"Mercuric chloride, in aqueous solution, in the proportion of 1 in 10,000, is a reliable agent for the destruction of micrococci and bacilli in active growth not containing spores; and in the proportion of 1 in 1000 it destroys the spores of bacilli, provided that the micro-organisms to be destroyed are fairly exposed to its action for a sufficient length of time. A standard solution of 1 in 1000 may be safely recommended for the disinfection of bedding and clothing which can be washed, for washing the floors and walls of infected apartments, for disinfecting the hands and instruments of surgeons and gynæcologists, and as a disinfecting wash for superficial wounds or mucous surfaces. For continuous application to wounds, &c., a solution of 1 in 10,000, or less, should be effective. A standard solution of 1 in 500, with the same quantity of potassium permanganate, may be safely recommended for the disinfection of liquid fæcal discharges, and other fluid material supposed to contain 'disease germs,' provided the time of exposure is not less than two hours, and the quantity of material to be disinfected is not in excess of that of the standard solution used."

WEST INDIAN FEVERS.

DR. A. W. REYES of Havana has published a pamphlet giving an account of the graver West Indian fevers, in which he says that owing to unusually severe meteorological conditions—intense heat followed by rain—fatal malarial fevers were very numerous last year. He advises medical men, when rain comes after great heat, to prepare for a treacherous and destructive enemy, and in general to treat all fevers with quinine; and he recommends mothers of families to be on the look-out for the first signs of fever and to call for medical aid immediately, suggesting that if they will "provide themselves with thermometers (for the detection of incipient fever), they will save many professional honoraria—and some tears."

PNEUMONIA IN NEW YORK.

A SUMMARY of 252 cases of lobar pneumonia is given in the form of a paper in the *Medical Record* for March 28th, by Dr. Edwin T. Doubleday, registrar of the New York Hospital, which was opened in 1877. In the earlier years the histories were not complete. The decades in which the largest number of cases occurred were from the ages of twenty to thirty, 70 males and 18 females; thirty to forty, 47 males and 13 females. In 199 cases there was no assignable exciting cause; in 47 cases there was exposure to wet and cold. There was an acknowledged alcoholic history in almost 50 per cent. of the cases, and where the history was marked the death-rate was 68 per cent. The complication most frequently noticed was pleurisy. The mortality was great. In the complicated cases, 85 died and 49 recovered; in uncomplicated, 33 died and 81 recovered. This high mortality is attributed by the author to the large number of complicated cases; the large number of those past treatment and moribund on admission to hospital; the patients being alcoholics as a rule; and the late day of admission, the fifth day of the disease. The remedies used were aconite (in a few cases) and quinine (extensively); when the case was seen before consolidation a dose of calomel (five to ten grains) was frequently given. For delirium, a very sparing use was made of bromides, chloral, and morphia. For heart failure, ammonia and tincture of digitalis (five to twenty minims) every three hours, with alcohol, were employed. Alcohol, in the form of whisky, was given early. Lately antipyrin had been given in 12 cases with the effect of reducing the temperature from 1° to 3°, and causing slight sweating and slight cardiac depression. The individual remedies, excepting perhaps the calomel, are not open to much criticism; but the result is certainly not satisfactory, and contrasts very unfavourably with the result in Dr. F. Hughes Bennett's series of cases to which we referred last week.

EXPERIMENTAL EPILEPSY.

A COMMUNICATION has been made by M. Vulpian to the Académie des Sciences on the results of excitation of the white matter in the neighbourhood of the sigmoid gyrus. He asserts that the convulsions of epilepsy are manifested not only in the voluntary muscles, but also in those of organic life, as witnessed in the modification of the secretions, the dilatation of the pupils, and the like. He has sought to determine the influence of excitations of the cerebral white matter on the secretion of bile, pancreatic juice, and urine. Cannulæ were placed in the bile-duct, pancreatic duct, and ureters of the animals employed. Electrical stimulation was employed. The secretion of bile was found to be augmented; that of the pancreas was not influenced either way; that of the kidney was arrested. By curarising a dog and keeping up artificial respiration he has determined that excitations of the surface of the gyrus in question gave rise to a genuine attack of epilepsy of the involuntary muscular tissue. M. Vulpian believes that the last-mentioned experiment has not hitherto been carried out.

HONEST CRITICISM.

WE congratulate our contemporary, the *Grocers' Gazette*, on having vindicated the undoubted right of the press to point out tricks of trade which are injurious to the health of the public. If it were not permissible to put the community on its guard against adulteration and the selling of impure or bad goods as fit for use and of excellent quality, it would be useless to touch the subject of sound and unsound food at all. It seems strange that any manufacturer should have had the temerity to go before a court with so poor a plea as that urged against the *Grocers' Gazette*. Simple justice has been done, and the public interests have been secured. Our contemporary has done good service.

THE PIGMENTARY SYPHILIDE.

IN the April number of the *Monthly Journal of Cutaneous and Venereal Diseases* an excellent chromolithograph illustrates a brief original article by Dr. R. W. Taylor on the Pigmentary Syphilide. Many authorities, both at home and abroad, now recognise the existence of a certain chromatogenous affection peculiar to syphilis, which is variously designated the pigmentary syphilide and syphilitic leucoderma. Dr. Taylor comes to the conclusion that syphilis frequently causes a deep cutaneous pigmentation, which

occurs in spots without any affection of the skin between the maculæ; he believes, also, that syphilis may cause pigmentation and leucoderma in the same case, as well as an abnormal distribution in the amount of pigment normally present in a given area of skin, so that there is a preponderance of the leucodermatous changes as compared with the pigmented maculæ.

"SIMULO" IN EPILEPSY.

IN the *Boletin Médico*, published at Trujello, Peru, Dr. Larrea y Quezada describes the treatment of his own case of epilepsy, when a boy of thirteen, by simulo, which is the fruit of a plant of the hyssop family—Capparis coriacea. The dose was forty-five grammes of the powder in wine night and morning. Though he had suffered from fourteen attacks, preceded by a distinct aura, his cure was immediate and complete. Since he has been in practice he has employed the drug in all cases of epilepsy, and also in nervous and hysterical cases, with the best results.

A CORRESPONDENT has written to us calling attention to the condition of the Salvation Army in the barracks at Clapton. He states that small-pox is now, and has for some time past been, very prevalent among the persons resident in the building; in fact, lately, scarce a day has passed without some patient being removed, and yet these people are allowed to hold meetings and to march through the streets, to say nothing of their going into the homes of the poor in the neighbourhood. If our correspondent's statements are correct—and we have no cause to doubt them,—the proceedings of the Clapton Salvationists, as a means of spreading small-pox, should engage the attention of the medical officer of health.

WHILST recently partaking of luncheon in a restaurant at Portsmouth, Retired Staff Surgeon Augustus Slight, R.N., died apparently in a fit. A post-mortem examination showed that the deceased, who was seventy years of age, had been suffocated by a piece of meat which was lodged in the throat. The inquest was held on the 9th inst., when the jury returned a verdict of accidental death. The deceased was assistant-surgeon of the *Wasp* at the storming of Sidon and the bombardment of St. Jean d'Acre in 1840, for which he was awarded the medal.

A MADRID medical journal of April 8th says:—"In Jativa the cases of 'suspicious disease' continue. This is a modern denomination for diseases which we are not able to classify, and for which a special column should be opened in our health bulletins. Up to the 6th inst. the official statement is as follows:—'Suspicious diseases (?) attacked, 6; cured, 4; died, 7; still on the sick list, 25. Of these 25, 8 are seriously ill, 2 are getting better, and 15 are convalescent.'"

THE member of the Rochester Town Council who recently stated that he believed there were nearly sixty cases of small-pox in Gillingham has written to the Gillingham Board of Health, saying that he had found he had overstated the total, and that he regretted having done so; but the statement was not made in public or at a council meeting, but in committee, and was not intended to appear in the newspapers.

THE prize for the best essay on the Prevention of Blindness, offered by the English Society for the Prevention of Blindness, has been awarded to a German physician, Dr. Fusch.

DR. and MADAME BRACHET have had the honour of being presented to the Queen during her Majesty's visit to Aix-les-Bains; and Madame Berthier, widow of the late Dr. Berthier, who attended Princess Beatrice during her stay at Aix two years ago, has had the honour of being received by her Royal Highness.

THE statement that small-pox had attacked the inhabitants and employés of the Japanese Village at Albert-gate has been contradicted by an inspector sent to inspect the building by the Local Government Board and by the Sanitary Committee of the Board of Works for the Westminster district.

A TELEGRAM from Marseilles to the Paris *Temps* states that orders have been given to the French authorities to impose three days' quarantine on all arrivals from Spain, on account of the suspicious disease prevalent in some parts of that country.

SIR ROBERT LOYD-LINDSAY, chairman of the National Society for Aid to the Sick and Wounded in War, has received from Mr. Kennett Barrington, its Commissioner at Suakim, a highly satisfactory account of the work done by the representatives of the Society in Egypt.

THE Academy of Medicine of Lima, Peru, is endeavouring to organise chemical and physiological laboratories and an anatomical and pathological museum. At present an especial study is being made on several important questions relating to prophylaxis and hygiene in infancy.

Pharmacology and Therapeutics.

BROMIDE OF ZINC.

THE following conclusions have been arrived at by M. Testa. Bromide of zinc in small doses diminishes sensation; in large doses it diminishes motility; finally, it may cause complete sensory and motor paralysis. The motor and sensory disorders may gradually pass away if the dose given be not too large. Bromide of zinc stops the frog's heart in diastole, but this effect takes some time to appear; its action is more like zinc than bromide of potassium, since zinc disorders sensation first and motion later, whilst bromide of potassium affects both sensation and motion at the same time, though the latter more than the former. Zinc in the bromide ought certainly to be modified in its action by the presence of bromine, and in mammals a certain degree of somnolence was observed. Bromide of zinc acts first on the peripheral terminations of the sensory nerves, and afterwards on the spinal centres, without, however, passing over the nerve trunks. An effect on the cerebrum cannot be denied seeing that somnolence has been observed after the administration of the drug, but the disorders of sensation and motion are independent of its cerebral effect.

BOLDO AND BOLDINE.

Boldo, either as an infusion or extract, which grows in Bolivia, has been employed for a long time in diseases of the liver. The essence and tincture were experimentally investigated by MM. Dujardin-Beaumetz and Vernes in 1874; diuresis and somnolence were the chief effects observed in animals. Boldine appears to be a glucoside, and is extracted from the leaves of boldo; it is obtained as a concentrated solution of an orange-yellow colour, and has an aromatic odour. In animals—guinea-pigs, dogs, rabbits—boldine given by the stomach, under the skin, or into the veins, causes marked drowsiness, which lasts a variable time, and passes into a condition of apparent death. A fatal dose causes death without exhibiting any reaction, and without convulsions. The fatal dose is ·2 centigramme per kilogramme of body weight. In physiological doses the induced sleep passes away without causing any disagreeable

effects. In frogs, injections of boldine induce loss of sensation, and the instillation of some drops of boldine into the eye causes insensibility of the cornea like that produced by cocaine. The hypnotic action of boldine is exerted through the intermediation of the cerebral centres, for the somnolence does not appear if the brain be removed or the bulb be divided. In man, boldine administered to the extent of five or six grammes in divided doses has twice been followed by calm and profound sleep. M. Laborde is the author of these new experiments.

COLCHICINE.

M. Laborde has restudied the physiological effects of colchicine. In animals the subcutaneous injection of colchicine into a leg produces at first paralysis of the limb. The general symptoms observed were disorders of the circulation and respiration; digestive disturbances in the form of vomiting of food, next of bile, and finally of blood, were observed; diarrhœa, both of fetid and bloody stools, may occur, whereby a dog may lose a kilogramme of its body weight in the course of a few hours. Death may supervene as the result of paralysis of respiration. A dose of forty centigrammes given to a man caused a feeling of oppression at the epigastrium, violent headache, vomiting, diarrhœa, and fainting. A dose of from five milligrammes to one centigramme gave rise to nausea, some vomiting, and a little diarrhœa; the salivary and urinary secretions were also augmented.

THE ACTIVE PRINCIPLE OF SENNA LEAVES.

A paper which has been published in full in the *Pharmaceutical Journal* gives an account of some original investigations made by Dr. Ralph Stockman on the cathartic principle contained in senna leaves. The cathartic acid was separated after a good deal of trouble by means of baryta. The separated principle was proved to be a powerful cathartic by experiments on rabbits. Experiments made by injecting the cathartic acid, which has been proved by Dr. Stockman to be a coloured glucoside, into the subcutaneous tissues and jugular vein of rabbits, appear to show that the principle cannot cause purgation when introduced into the circulation. Very large doses were thus administered, and the animal simply appeared to be out of sorts for a few days, probably as the result of the operation. In all these cases the urine gave the caustic potash reaction, showing that the cathartic acid had been decomposed in the blood.

DETECTION OF ALKALOIDS.

The graphic method now so extensively adopted by physiologists working at the action of drugs on the heart has been used by M. Laborde in some researches on alkaloids. He states that a twentieth of a milligramme of aconitine in the blood suffices to give a graphic tracing of the beats of the heart which is absolutely characteristic of the action of aconitine. In a dog dead from the ingestion of a substance of doubtful nature, veratrine or aconitine, for example, if an extract of the vomited matters be injected into the system of an animal the heart gives tracings which M. Laborde asserts may be correctly assigned to this or that alkaloid.

THALLINE.

According to MM. Brouardel and Loye, thalline diminishes the respiratory capacity of the blood by destroying its hæmoglobin. Its action is said in this respect to resemble that of kairin and to differ from that of antipyrin, which, according to Henocque, has no deleterious influence on hæmoglobin. MM. Laborde and Rabuteau consider that the physiological effects of the different antipyretics cannot be regarded as properly worked out because of the variable chemical composition. M. Henocque states that his results with antipyretics have been uniform and characteristic, so that if the antipyrin be impure, the impurity is always of the same nature.

SULPHATE OF CINCHONAMINE.

Cinchonamine is an alkaloid found by M. Arnaud in the remigia Purshiana (rubiaceæ), which is indigenous in Brazil. MM. Sée and Bochefontaine have investigated the physiological action of the soluble sulphate of cinchonamine on frogs, guinea-pigs, and dogs. The chief effects observed were progressive enfeeblement of the physiological functions of the central nervous system, convulsive phenomena, and weakening and slowing of the heart's action. Large doses cause rapid death by arrest of the heart in diastole, in frogs as well as mammals. Atropine is powerless to restore the movements of the heart after they have been stopped by cinchonamine. The toxic effects of the sulphate of cinchonamine are about six times greater than that of quinine, cinchonidine, and cinchonine.

BENZOLE IN RODENT ULCER.

The application of pure benzole to rodent ulcers is recommended, and has been practised, by Dr. Sherwell of New York. It does not cause pain, but destroys the sensibility of the parts, giving them a blanched appearance and causing a kind of mummification. After a time a scab is formed, which should be removed and more benzole applied. He suggests also the employment of benzole in cases of cancer of the os uteri, but it may be doubted whether its application to this site would prove efficacious.

PARALDEHYDE.

Dr. T. Suñol states in the *Independencia Médica* that he has used paraldehyde hypodermically in doses of half a drachm to one drachm in bronchitis, tuberculosis, jaundice, typhoid, rheumatism, gastritis, heart diseases, pleurisy, neuralgia, and alcoholic delirium, generally inducing a sleep of from two to six hours, a sleep calm and untroubled, and not followed by headache on awakening. He has only observed excitement in febrile patients. As it does not affect the beats of the heart, it is better than chloral in cardiac cases with much debility, and especially where there is fatty degeneration.

SYNTHESIS OF CONIINE (?).

The *Pharmaceutical Journal* states that M. de Coninck has synthetically prepared a liquid alkaloid isomeric with coniine. Six atoms of hydrogen were introduced into the molecule of β-collidine derived from the decomposition of cinchonine. This artificial alkaloid has been named "isocicutine;" M. Bochefontaine asserts that its physiological properties are like those of the alkaloid obtained from hemlock.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

THE Association of Members of the Royal College of Surgeons has recently forwarded a circular to each member of the College, in which is contained a brief account of the work done by the Association during the first year of its existence for the purpose of obtaining certain reforms in the projected new Charter of the College. After detailing the proceedings taken up to the time the requests of the Association were laid in writing before the Council of the College, the two main points in the requisition being (1) that Fellows and Members shall elect an equal number of representatives to constitute the Council, and (2) that in addition to a poll election at the College, voting by voting papers, to be sent to all Fellows and Members resident in the United Kingdom, shall be allowed, the committee of the Members' Association state that the Association of Fellows appear somewhat liberal in their views; they have proposed, amongst other things, that there shall be an annual general meeting of Fellows and Members, at which the annual report of the Council shall be presented, discussed, and, if approved, adopted; also that no alteration in the constitution and relations of the College shall be effected without the consent of the Fellows and Members, specially convened to discuss such alterations; and that on receipt of a requisition signed by thirty Fellows or Members the president shall convene a general meeting. These proposals, with the addition of representation of Members and election by voting papers, embrace nearly the whole of the preliminary question as far as the Members are concerned; but whether the Council will accede to the requisition is doubtful unless great pressure be brought to bear upon them, and the committee consequently conclude by urging all members of the College who have not already done so to join the Association, in this manner establishing a powerful and influential Association for the protection of the interests of the medical practitioner.

AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund held on the 14th inst., Sir N. W. E. Smart, K.C.B., M.D., Inspector General, in the chair, the sum of £67 was distributed among the several applicants.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.[1]

Typhoid Fever at York, by Dr. AIRY.—The medical officer of health for the city of York reported last autumn an outbreak of enteric fever which had already caused 27 deaths. The cause did not appear to lie in the drinking-water nor in the milk-supply, but, according to his view, was dependent in some way on the condition of the subsoil water. Some obscurity, however, attached to the circumstances of the prevalence. Mr. North had made some lengthened investigation into the subject, and he found that from January to the middle of November there had been 315 attacks with 50 deaths, thus giving a high rate of mortality. The total population of York, according to the last census, was 49,530. According to Dr. Airy, York is divided into three registration sub-districts—Bootham, Micklegate, and Walmgate,—and the annual average "fever" death-rates for the ten years ending 1883 were 2·8 per 10,000 for Bootham and for Micklegate, and 3·8 for Walmgate. Fever has also fluctuated in the city; it was specially prevalent in 1875 and in 1881, whereas 1877 was distinguished for its comparative absence. The mortality had been at its height during the autumn months, culminating in October, and thus corresponding with general experience throughout the country at large. York, then, may be regarded as being habitually liable to fever in an endemic form, and this especially in the Walmgate district; and also to epidemic prevalences at occasional intervals. Dr. Airy then proceeds to describe in detail the physical circumstances affecting these three districts severally, to point out in what respects they differ, and to indicate the various localisations of the fever in the different portions of the several districts referred to. He next proceeds to discuss such questions as the water-supply, milk-supply, &c. The water-supply cannot be regarded as a satisfactory one, it being derived from the Ouse at a point below which it receives the drainage of many villages and much agricultural and other land. It is also dammed up below York by means of a weir and lock, and hence during periods of drought such as occurred last year any pollution might become concentrated and lead especially to affect the source near the intake. Dr. Airy is, however, inclined to think that at all times during the year the flow in the river was sufficient to enable him to eliminate the special source of danger which the backing up of sewage would have caused. Then, again, the water-supply being the same for the whole of the city, any injurious property it possessed would presumably affect the whole city impartially, whereas, as a matter of fact, the incidence of the fever was markedly upon three separate spots in the city. Local water pollutions in the mains or otherwise might have occasioned this special incidence; but after all the conditions likely to have led to any such occurrence had been thoroughly sifted, no ground could be found for any suspicion of the kind. Milk and other beverages as a cause of the disease had also to be set aside. Coming next to privies, &c., it would appear that York is not favourably placed, and there seemed no doubt but that infection had been spread by means of faulty structures; but the actual cause of the epidemic did not lie here. A good deal of attention has also been paid in York to disconnecting house drains, especially in the poorer parts of the city, and such connexions are hence eliminated as a cause of disease. The sewers were laid in 1854-56; they have their outfalls below the summer level of the Ouse; they have no intentional means of ventilation, and there is hardly any provision for their systematic flushing. The only means of relief from pent-up foul air which they have lies in untrapped street gullies, rain pipes directly connected with the sewers, and defectively trapped house connexions. Frequent complaint is made of the habitual sewer stink, and, according to Dr. Airy, York is from this cause in a state of chronic infection that probably accounts for its habitual fever prevalence. As one sewer chances to be more impregnated with infection than another, so one region or another would suffer most, and the specially foul conditions connected with the Foss sewer appeared fully to explain the habitual incidence of fever upon the Walmgate district. So much for the general fever prevalence in York. As to 1884, it deserves notice that the fever mortality for the third quarter of that year in the whole of the East Riding was more than double the average of that for the preceding five years. The summer was remarkably warm, the rainfall was much below the average, and so accumulation of sewage in drains and sewers would be specially favoured, and the offensiveness at certain outfalls is well remembered by many inhabitants of the city. Indeed, Dr. Airy is of opinion that throughout August there was a ripening of conditions exceptionally favourable to the development of typhoid poison in the York sewers, and he inclines to the view that such a gradual ripening must, sooner or later, have culminated in an outbreak of fever, even without the occurrence of any signal event that could be recognised as the determining cause. As to the ground air, it is highly probable that the special conditions of the autumn of 1884 may have led to the expulsion from the soil, by means of a rise in the subsoil water and otherwise, of foul air, and that such occurrences may materially have aided in the special prevalence from which York has suffered. The drawing-off of the Foss water and its subsequent rise had doubtless an influence in this direction; but such influences were probably local only, and would hardly account for the simultaneous outbreaks such as occurred in some large districts. How far meteorological conditions may have aided in this result is uncertain—we know too little about their influence to judge; but there was very little change of atmospheric pressure in the month of August. The report is an interesting one, and well deserves study. We are glad that it is one of those which have been placed on sale.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Kettering Urban District.—This town has in recent years effected substantial sanitary improvements, and during the past eight years there have been only five deaths from enteric fever in a population now reaching some 14,250. Last year there was but little infectious disease of any sort. The deaths under one year of age are, however, unsatisfactorily high. Last year they amounted to nearly 18 for every 100 births, a rate which is excessive. Mr. Dryland attributes it mainly to ill-feeding, soothing syrups, and neglect, conditions which are all but invariable in towns where female labour is employed. Some diarrhœa was brought about by the extreme drought, which caused a scarcity in the public water-supply, and in the effort to remedy this the supply became so muddy that people resorted again to old disused wells. Common lodging-houses and slaughter-houses are well looked after, the bakehouses are inspected with regularity, the system of public sewerage is being added to and perfected, vaccination is efficiently performed, and sanitary work in general would appear to be carried out under a system of regular supervision.

Chester-le-Street (Rural).—The Rural Sanitary Authority of Chester-le-Street has divided their district for public health purposes into two parts, each of which is co-extensive with a registration sub-district. The report for Chester-le-Street sub-district shows that during 1884 the death-rate from all causes was comparatively low, although both the mortality from zymotic diseases and the death-rate of children were excessive. Dr. Morris estimates the population of his district in the middle of 1884 at 24,500, but he omits to state on what basis the estimate is calculated. Based upon the rate of increase that prevailed between 1871 and 1881, the estimate would be considerably more; and judged by the birth-rate, which is given as 43·3, it would appear certain that the present population is not over-estimated. The death-rate last year was 19·3, slightly below the rate in the whole of England and Wales, and 1 per 1000 below the mean rate in the county of Durham. The deaths from the principal zymotic diseases were 69, which included 26 from scarlet fever (so constantly fatal in mining populations), 23 from diarrhœa, 9 from typhoid fever, and 2 from small-pox. These 69 deaths were equal to a rate of 2·9 per 1000. With regard to child mortality, it is stated that of the 472 deaths in the year, 241, or 51·1 per cent., were of children under five years of age, an undoubtedly excessive proportion, but giving no real clue to the true rate of child mortality, which can only be calculated upon the number of children living at the same ages. Infant mortality—that is,

[1] To be purhased of Knight and Co., 90, Fleet-street; Shaw and Sons, Fetter-lane; Haddon, Best, and Co., West Harding-street; and P. S. King and Son, King-street, S.W.

the deaths of infants under one year—was equal to 15·8 per cent. of the births registered, showing a marked excess. Dr. Morris appears to have debited the whole of the deaths in the union workhouse to his sub-district; if this be the case, it is an obvious oversight. Twenty-six cases of small-pox were reported in the district, but only two deaths were referred to this disease, and with regard to one of those cases the medical officer is "disposed to think that the cause of death was malignant scarlet fever." The authority, which has not yet seen the necessity to provide any hospital accommodation for infectious diseases, is to be congratulated at having at present escaped an epidemic outbreak of the disease. It is, however, impossible to say how many of the 26 deaths from scarlet fever might have been avoided if such accommodation had existed. It appears from the report that 67, or 13·7 per cent., of the deaths during the year were uncertified, in most cases because the deceased persons had been attended by unqualified, or at any rate unregistered, medical practitioners. One of these uncertified deaths was attributed to typhus; and with regard to this case the medical officer satisfied himself that, "whatever was the cause of death, it certainly was not typhus." Such a state of things is as bad for our national mortality statistics as it is for the public.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5804 births and 4271 deaths were registered during the week ending the 11th inst. The annual death-rate in these towns, which had been equal to 23·5, 23·2, and 23·1 per 1000 in the preceding three weeks, rose last week to 25·0, and exceeded the rate in any previous week of this year. During last quarter the death-rate in these towns averaged 21·9 per 1000, and was 2·3 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 20·0 in Brighton, 20·5 in Leeds, 20·9 in Derby, and 21·2 in Norwich. The rates in the other towns ranged upwards to 33·8 in Preston, 35·8 in Huddersfield, 36·0 in Manchester, and 41·9 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased from 377 to 465 in the preceding six weeks, further rose to 478 last week; they included 164 from measles, 127 from whooping-cough, 49 from diarrhœa, 40 from small-pox, 35 from "fever" (principally enteric), 34 from scarlet fever, and 29 from diphtheria. No death from any of these diseases was recorded last week either in Leicester or in Bolton, whereas they caused the highest death-rates in Manchester, Sunderland, and Newcastle-upon-Tyne. The greatest mortality from measles occurred in Huddersfield, Sunderland, and Newcastle-upon-Tyne; from whooping-cough in Sheffield and Bristol; from scarlet fever in Sunderland and Wolverhampton; and from "fever" in Halifax and Norwich. The 29 deaths from diphtheria in the twenty-eight towns included 15 in London, 4 in Cardiff, 3 in Birmingham, and 2 in Portsmouth. Small-pox caused 69 deaths in London and its outer ring of suburban districts, 2 in Sunderland, 1 in Manchester, and 1 in Leeds. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had increased from 830 to 879 in the previous two weeks, further rose last week to 910; the admissions also rose to 185 last week, from 179 and 141 in the preceding two weeks. The Highgate Small-pox Hospital contained 91 patients on Saturday last, 22 having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 448 and 478 in the previous two weeks, further rose last week to 512, and exceeded the corrected average by 2. The causes of 109, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Sheffield, Hull, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 23·3 and 25·0 per 1000 in the preceding two weeks, declined again to 23·4 in the week ending the 11th inst.; this rate was 1·6 below the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 5·0 and 17·5 in Perth and Aberdeen, to 27·3 in Paisley and 29·0 in Glasgow. The 570 deaths in the eight towns included 24 which were referred to measles, 17 to whooping-cough, 10 to "fever" (typhus, enteric, or simple), 8 to diarrhœa, 6 to scarlet fever, 3 to diphtheria, and not one to small-pox; in all, 68 deaths resulted from these principal zymotic diseases, against 73 and 84 in the preceding two weeks. These 68 deaths were equal to an annual rate of 2·8 per 1000, which was almost identical with the rate (2·9) from the same diseases in the twenty-eight English towns. The 24 cases of measles, of which 22 occurred in Glasgow and 2 in Dundee, showed a further increase of 1 upon the numbers in the previous two weeks. The deaths from whooping-cough, on the other hand, declined to 17, from 35, 32, and 34 in the preceding three weeks; 10 occurred in Glasgow, and 2 each in Dundee, Leith, and Paisley. The 10 deaths referred to "fever" showed an increase upon recent weekly numbers, and included 6 in Glasgow and 2 in Greenock. The 8 deaths attributed to diarrhœa were 12 below the number in the corresponding week of last year. The 6 fatal cases of scarlet fever, of which 4 occurred in Glasgow, showed a decline of 5 from the number in the previous week. It appears that in Scotland chicken-pox is still classed as small-pox; this is contrary to the classification adopted in the English and Irish returns since 1881. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 122 and 130 in the previous two weeks, further rose to 134 last week, and were 22 above the number returned in the corresponding week of last year. The causes of 77, or nearly 14 per cent., of the deaths in these Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 40·4 and 33·6 per 1000 in the preceding two weeks, further declined last week to 32·2. During the thirteen weeks of last quarter the death-rate in the city averaged no less than 34·0 per 1000; whereas in London and in Edinburgh the rate did not exceed 20·8 and 20·0 respectively. The 218 deaths in Dublin last week showed a further decline of 9 from the high numbers in the preceding two weeks, and included 29 which were referred to the principal zymotic diseases, against 32 and 24 in the previous two weeks; 19 resulted from measles, 4 from diarrhœa, 2 from "fever," 2 from diphtheria, 1 from scarlet fever, 1 from whooping-cough, and not one from small-pox. These 29 deaths were equal to an annual rate of 4·3 per 1000, the rates from the same diseases not exceeding 2·7 in London and 0·8 in Edinburgh. The fatal cases of measles in Dublin, which had been 16, 12, and 13 in the preceding three weeks, rose last week to 19, and exceeded the number in any previous week of this year. The deaths referred to "fever," on the other hand, showed a further decline from recent weekly numbers. The 2 deaths from diphtheria were above the weekly average. Nine inquest cases and 5 deaths from violence were registered; the 54 deaths in public institutions were considerably below the average in recent weeks. The deaths both of infants and of elderly persons somewhat exceeded the number in the previous week. The causes of 30, or nearly 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Dr. Doyle Glanville has gone to the Soudan with the New South Wales Contingent as Staff Surgeon. Dr. Glanville was attached to Colonel Durnford's column, consisting of 2000 men, the whole of whom, including Colonel Durnford and the 1st 24th Regiment, were massacred with the exception of some thirty survivors only. Dr. Glanville escaped, having been ordered to march out the night previously with a party of reconnaissance, and was three miles away from camp when it was attacked. He was then placed on the medical staff of General Wood's column, and served with the flying column, and was present at the battle of Ulundi, when he was mentioned in Sir Evelyn Wood's despatches for distinguished conduct, published in the *London Gazette*, August 21st, 1879. After the battle of

Ulundi the column was disbanded, and Dr. Glanville was then attached to the 1st King's Dragoon Guards, Lord Wolseley's military escort, and proceeded with them through the Transvaal.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Albert Benjamin Robinson is granted retired pay, with the honorary rank of Brigade Surgeon. Surgeon-Major James Henry Ussher, M.B., has retired on temporary half-pay.

MILITIA MEDICAL STAFF.—Surgeon Thomas Dodson Palmer, 8th Brigade, North Irish Division, Royal Artillery, to be Surgeon-Major.

ADMIRALTY.—The following appointments have been made: Staff Surgeon Alexander Flood, to the *Forward;* Staff Surgeon Stewart F. Hamilton, to the *Dolphin;* Staff Surgeon Charles W. Maynard, to the *Penelope;* Staff Surgeon Michael Fitzgerald, additional, to the *Hibernia;* Staff Surgeon T. D. Gimlette, to the *Euryalus;* Fleet Surgeon Edward Meade, to the *Iron Duke;* Staff Surgeon William F. Spencer, to the *Triumph;* Staff Surgeon Henry J. Madders, to the *Duke of Wellington;* Surgeons Henry F. Kiewiez and C. L. Nolan, to the *Iron Duke;* Surgeon Robert F. Yeo, to Sheerness Dockyard; Surgeon Justin F. Donovan, M.D., to Malta Hospital; and Mr. Samuel Hamill, to be Surgeon and Agent at Burnham, Brancaster, and Thornham.

The undermentioned Surgeons have been promoted to the rank of Staff Surgeons in Her Majesty's Fleet—viz., Richard Dormer White, M.A., M.D.; John Wilson, M.A., M.D.; Henry John Madders, M.D.; Alexander Flood, Michael Fitzgerald, Stewart Frazer Hamilton, and Charles William Magrane.

In accordance with the notice appearing in the *London Gazette* of May 21st, 1884, Surgeon Thomas Desmond Gimlette has been promoted to the rank of Staff Surgeon in Her Majesty's Fleet.

In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Staff Surgeon Henry Scanlan has been placed on the retired list of his rank.

ARTILLERY VOLUNTEERS.—2nd East Riding of Yorkshire: Acting Surgeon Arthur Henry Robinson, M.D., resigns his appointment.

RIFLE VOLUNTEERS.—3rd Hampshire: Acting Surgeon Arthur Vernon Ford, from the 4th Volunteer Battalion, the Essex Regiment, to be Acting Surgeon.—2nd Lanarkshire: Lieutenant Robert Thin Craig Robertson, M.B., is appointed Acting Surgeon.

Correspondence.

"Audi alteram partem."

THE MEDICAL BILL AND THE SCOTCH UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—I read with some surprise in your leader of April 11th that Sir Wm. Jenner, in his address at the College of Physicians, attributed the withdrawal of the Medical Bill of last year to the "determined opposition of Scotch universities." Now, I yield to no one in my respect for the personal character and high professional attainments of our President, but he has been led into error in this case by an imperfect consideration of the subject, and his position in Trafalgar-square and as an ex-Royal Commissioner does not entitle him to override the facts of the case. I happened to hear every word that was spoken on the three occasions when the Bill was under discussion, and can remember nothing which would imply determined hostility on the part of the Scotch universities, whose adverse influence, if exerted to the full, would no doubt have been disastrous, if not fatal, at any period of legislation. If you will refer to Hansard, you will find that after two full debates on the second reading a further stage was reached on June 30th, when Mr. Mundella moved "that the Speaker do now leave the chair." This was agreed to after some wrangling from quarters not usually favourable to the unobstructed work of the House, and it was further arranged that the Committee should be taken in not less than a week, so that amendments might be put down and duly criticised. Then came the collapse. The action of the House of Lords suddenly paralysed legislation, and Mr. Gladstone announced that he should withdraw all Bills which had not passed through the grand Committees. As the Medical Act Amendment Bill came under this hard-and-fast rule, it had to be ruthlessly flung overboard without reference to popularity, or opposition, or stage of progress, and neither Mr. Mundella nor the House, nor any university or corporation, nor influence, however powerful, could save it from a fate which it shared with many others. The general impression was that if accident had not thus abruptly checked its career, the Bill had a good chance of passing; but the opinion was equally unanimous that Sir Lyon Playfair's amendment would have materially smoothed the way to the ultimate goal of success, and would certainly have saved the licensing bodies from damage, and possibly from ruin. I have always been surprised at the equanimity with which universities and corporations seemed to view their future prospects as affected by the Bill, and by the small amount of alarm which they showed at its destructive tendencies. It is surely utopian to believe that the ordinary rank and file of medical students, whose time and money are not too abundant, will wish to obtain anything beyond the simple right to practise conferred by the Conjoint Board, and the purveyors of fancy qualifications would soon perish from sheer inanition under the provisions of the Bill. Sir Lyon Playfair's amendment would have prevented these risks, and his able advocacy of his views contributes, if that were possible, to increase the estimation in which he is held in the House as an able and eloquent exponent of all that is soundest and best in education and science.

I am, Sir, your obedient servant,

Reform Club, April 14th, 1885. ROBERT FARQUHARSON.

*** Dr. Farquharson's views are entitled to much respect; but he will not shake the general opinion, as well as Sir William Jenner's, that the Scotch Universities, represented in Sir Lyon Playfair's amendment, really sealed the fate of the Bill which they had previously assented to. The other opposition was unreal and confessedly obstructive; that of Sir Lyon Playfair was subtle, but fundamental and serious. We are sorry that it should have the countenance of Dr. Farquharson, who, as a most worthy alumnus of the University of Edinburgh, should not be so fearful of the interests of his *alma mater*. Does he carry his admiration of Sir Lyon so far as to justify the way in which he misled the House by conjuring up a community with an inadequate supply of medical men, by largely overstating the waste of the profession, which, on the contrary, is overstocked and underpaid?—ED. L.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS AND THE ASSOCIATION OF MEMBERS.

To the Editor of THE LANCET.

SIR,—May we be permitted through the medium of your columns to protest, on behalf of the Association of Members of the College, against the unconstitutional course of action which has been adopted by the Council of the Royal College of Surgeons of England with regard to the new Charter.

In March of last year, at the general meeting of Fellows and Members, a resolution was passed requesting "that no alteration in the constitution or relations of the College should be effected without the consent of the Fellows and Members convened to discuss such alteration." This request has recently been repeated at the College by the delegates of the Association of Fellows, but has been ignored by the Council, who have determined to forward without delay to the proper authorities the proposed alterations in the Charter, on the ground that they were, in part, submitted to the general meeting in March, 1884. If the proposed form of the new Charter had been acceptable to the profession, the Associations of Fellows and Members would not now be in existence. The Fellows and Members collectively may be said to constitute the College, and they are agreed that no Charter should be presented to the Home Secretary without their united approval. It would appear, therefore, that the Council are attempting to legislate in direct opposition to the wishes of their whole constituency.

Furthermore, according to the present Charter no meeting

of the Fellows and Members is permitted, unless the Council *approve the object of such meeting*. This monstrous infringement of the liberty of the subject has been embodied in the draft of the new Charter with only a slight alteration in the wording. It seems hardly credible in these days of freedom of the press and liberty of action that a large, intelligent, and educated body of Englishmen should be debarred from holding public meetings for the discussion of questions relating to their government, their dignity, and their interests in a country which has been immortalised by the Poet Laureate as

> "The land where, girt with friends and foes,
> A man may speak the thing he will."

Since the Council of the College have persistently refused to consider the interests of its Members, and have turned a deaf ear to their appeals, the Association of Members have come to the conclusion that the only remedy for the unsatisfactory state of affairs which now exists is for Members of the College to obtain the right of electing their own representatives—either Fellows or Members—to sit upon the Council. In order to effect this reform, they have determined, much as they regret the necessity for such a step, to petition the Home Secretary to refuse to grant any Charter which does not provide for the representation of Members on the Council. A petition has been drawn up, and has already been signed by nearly a thousand Members. The Association of Members have, furthermore, determined to invite all Members of the College to attend the annual general meeting of the Association for the purpose of discussing what further steps must be taken in order to obtain such reforms as are felt by the profession to be most urgently needed in the administrative department of the Royal College of Surgeons. The meeting will be duly advertised in the medical journals, and will be held on May 5th, at 4 P.M., in the Westminster Town Hall.

Trusting to the ready manner in which you have always advocated any measure for promoting the interests of the medical profession, we take the liberty of transmitting to you this protest against what we consider to be a most unconstitutional measure on the part of the College authorities.

We beg to subscribe ourselves, Sir, your obedient servants,

WARWICK C. STEELE,
J. NIELD COOK,
W. ASHTON ELLIS,
Hon. Secs. to the Association of Members of the Royal College of Surgeons.

Western Dispensary, Westminster, April 13th, 1885.

INFECTIVE PHTHISIS.

To the Editor of THE LANCET.

SIR,—With reference to that part of Dr. Weber's Croonian lecture which appeared in your impression of March 14th, which implies that the power of imparting their own properties to outsiders inherent in the infective changes that take place in the lungs of phthisical patients "has been surmised long ago, even before the history of inoculation, which dates back at least as far as 1843," allow me to observe that this "surmise" is entitled to a far higher ancestry or antiquity than is claimed for it here. I published in THE LANCET of Dec. 4th, 1880, a short note of an occurrence in point which I took from a little brochure, entitled "Cardinal Allen's Defence of Sir William Stanley's Surrender of Deventer," Chetham Society's publications, p. 69, and I find from that very accessible compilation, Copland's Dictionary, article "Tubercular Consumption," p. 1125, that "although the occasional transmission of this disease by infection was believed, not only by Galen, but also by ..... several other writers [whose names he gives], yet that 'it' [the question of transmission by infection] still remains in doubt." Whether this doubt will survive the recent discovery of a special bacillus I will not here stop to inquire. What I wish to do is to point to the fact that a belief in the infective character of "pulmonary phthisis"—be the same acute or chronic—has existed from a much earlier date than that given above. Smollett, I think it was, showed that such was the impression, in his day, in Italy and elsewhere in the south of Europe.

"There was," says Ennemoser,[1] "a universally accepted belief in ancient times that living together and breathing upon any person produced bad as well as good effects ..... and pure virgins and young children were supposed able to free persons from diseases by their breath." He quotes the case of David from the Book of Kings, Bacon, Galen, and several others in this direction, and adds that "Rudolph of Hapsburgh is said, ... when very old and decrepit, to have kissed, in the presence of their relatives, the daughters and wives of princely, ducal, and noble personages, and to have derived strength and renovation from their breath. The Emperor Frederick Barbarossa, near the end of his life, was advised by a Jewish physician to have young and healthy boys laid across his stomach instead of using fomentations; and Johannes Damascenus, or Rabbi Moses, relates that for lameness and gout nothing better could be applied than a young girl laid across the affected part."

Discussing this question from this very standpoint in 1666, Gideon Harvey, M.D., whose book, called "Morbus Anglicus, or the Anatomy of Consumption," gave rise to the name "English disease," for this ailment, after observing that "the spring is bad for consumptives," adds (p. 3) that, "considering its malignity and catching nature, it may be enumerated with the worst epidemicks, since, next to the plague, pox, and leprosy, it yields to none in point of contagion, for it is (he says) no rare observation here in England to see a fresh-coloured, lusty young man yoked to a consumptive female, and him soon after attending her to the grave. Moreover, nothing we find (he continues) taints sound lungs sooner than inspiring the breath of putrid, ulcered, or consumptive lungs, many having fallen into consumptions only by smelling the breath or spittle of consumptives; others by drinking after them; and, what is more, by wearing the cloaths of consumptives, though two years after they were left." There was, of course, exaggeration here, but even that tends to show the current of educated thought in his time, and many of his professional contemporaries held similar views.

William Salmon, whose book, entitled "A Complete System of Physick," appeared in 1686, and who was, moreover, a firm believer in the hereditary transmission of this complaint, says in his "Chapter of a Consumption," p. 278, that "contagion may also be referred hither—i.e., as a cause for sufficient security cannot (he thinks) be given for them who live familiarly with consumptive people; as we have an instance in a woman that was no way predisposed to a consumption, and yet by lying with a consumptive husband she died of one. You may (he continues) find also other instances in Riverius"; and James, whose ponderous "Dictionary" is dedicated to Dr. Mead, does not hesitate to affirm that "if the miasma of this disorder is not sufficient to induce a phthisis, it is nevertheless capable of promoting it, if there is already a disposition to it." He adds that "this doctrine is confirmed to us by some of the most celebrated physicians," and he quotes several of these in point.

I am, Sir, yours obediently,

Auriol-road, West Kensington, March, 1885. WM. CURRAN.

[1] The History of Magic, Bohn's Library, vol. i., pp. 117-18.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE LATE SMALL-POX EPIDEMIC IN DURHAM.

DR. BARRON, the medical officer of health for the city of Durham, refers in his report to the late small-pox visitation. A very severe epidemic of small-pox occurred during the past year; about 400 cases came to the knowledge of the sanitary authority, of which 31 proved fatal. Dr. Barron remarks: "So far as I have been able to discover, the majority of those who died from the disease had never been vaccinated, and of the rest none have been vaccinated since infancy." "One result of the epidemic," Dr. Barron says, "has been to show that a large proportion of the community escaped vaccination," which points to a more stringent carrying out of the Vaccination Acts as a necessity in the future. Dr. Barron says that the epidemic, which began early in March, caused little alarm until the end of September, when it began to assume serious proportions. There was no hospital for the isolation of cases. The sanitary authority and the people themselves seemed blind to the impending danger; it was not until the alarming spread of the disease in October began to cause a wide-spread panic that the county magistrates came forward with the offer of the barracks as a temporary hospital, and the good that has resulted from this public-

spirited step no one will venture to deny. Dr. Barron, in his valuable and timely report, urges upon the authority to no longer hesitate in providing a permanent hospital for the reception of infectious cases, and he points out that the free gift by the Chapter of Durham of a site whereon to build this hospital lessens the difficulties which formerly stood in the way, and he further points out that it would be a great assistance in the stamping out of infectious diseases if the authority provided themselves with a disinfecting chamber fitted with the necessary apparatus for the disinfection of bedding, clothing, and other articles, and urges also the need of providing a mortuary, which he has frequently recommended to their notice.

MIDDLESBROUGH DISTRESS AND THE DEATH-RATE.

At the last meeting of the Middlesbrough Town Council the high death-rate of the borough came under consideration and the medical officer of health, Dr. Malcolmson, said that the death-rate of the town was increased in a marked degree by illness amongst young children, to a great extent having its origin in destitution. He said that in many of the houses there was not a single blanket, and many of the children had not a single article of flannel underclothing, besides being very insufficiently fed. He was asked if he could suggest any remedy, and he at once said that providing each child with a quart of milk daily, some flannel underclothing, and a blanket at night would tend more than anything else he could suggest to a diminution of the death-rate.

MUNIFICENT BEQUEST OF A DURHAM COAL-OWNER.

I have before mentioned the benefactions of Mr. John Eden of Beamish-park, Durham, to the Durham County Hospital Building Fund. This gentleman, who was an extensive owner of coal royalties, and possessed of immense wealth, died on the 4th ult. at his town residence, Winlaton-crescent, London, at the advanced age of ninety-one, and it has transpired that he has left a legacy of £10,000 to the Durham County Hospital.

THE MEASLES EPIDEMIC AT SUNDERLAND.

The medical officer of health for Sunderland, in his fortnightly return of the mortality in the town, states that during the past fortnight there were 193 deaths, or a rate of 40 per 1000 per annum, against 216 deaths in the preceding fortnight. He (Mr. A. E. Harris) further states that during the past two weeks there were 63 deaths from measles and 33 from diseases of the respiratory organs, or a total of 96.

ALNWICK INFIRMARY.

The many friends of Dr. Brown, late house-surgeon of the Alnwick Infirmary, left in the north will be happy to know that he has obtained the appointment of surgeon to the Red Cross, or National Aid Society for the Sick and Wounded in War. Dr. Brown is already on his way to Cairo, to enter on his duties; and it is certain that he will be accompanied in his mission and work with the best wishes of all who had the pleasure of his acquaintance.

Newcastle-on-Tyne, April 14th.

EDINBURGH.

(From our own Correspondent.)

A NEW LABORATORY.

AT a recent meeting of the Royal College of Physicians it was decided to establish a laboratory for experimental work in connexion with the College Library and Hall in Queen-street. The plan that is to be carried out will certainly place great facilities for original work at the disposal of the Fellows. The laboratory is to be fitted with all modern improvements in the way of scientific apparatus and the usual requisites, and the services of a skilled assistant are to be constantly at the disposal of any intending workers. This arrangement will afford, even to those engaged in busy practice, the opportunity of working up cases of special interest, for a few hours' notice to the assistant will suffice to place every requisite in readiness for their use; and the sacrifice of time usually necessary for the arrangement of minor details will thus be entirely obviated. The project is an admirable one, and will doubtless be carried out in a manner not unworthy of a body which maintains one of the largest and best appointed medical libraries in the world; and it can apply the large fund at its disposal to no more beneficial and praiseworthy purposes than these.

ERECTION OF A BOARD SCHOOL AND PUBLIC BATHS.

One of the oldest and most sacred objects of medical interest in Edinburgh has suddenly and silently vanished. The old infirmary of Monro Primus and of Provost Drummond, which till within the last few weeks has stood empty and forlorn, though very picturesque, has succumbed to the reforming efforts of an energetic Town Council and is making way for a large Board-school and handsome public baths. The latter especially have long been a great desideratum in Edinburgh, and the proposed structure will do much towards satisfying the requirements of the city in this respect. Commodious swimming and plunge baths are to be provided, and two extensive public laundries are to be attached to the premises; these will be a great boon to the crowded population of the district in which the building is to be constructed. Although one is bound to rejoice in the material advantages which the alterations will effect, one can but feel a pang at parting with the quaint old building where the fame of Edinburgh as a medical school was made, and where the vivid recollections of so many find a centre. Nor is it only to old students of the Edinburgh school that this building has a special interest: an even wider circle think with a touched interest of the scene where the saddest and most thrilling part of "Rab's" career was enacted. It is fortunate that in this case the hand of change brings with it little of a real desecration.

WORK AT THE MEDICO-CHIRURGICAL SOCIETY.

At the meeting of the Medico-Chirurgical Society held on April 1st several cases of considerable interest were exhibited. Mr. Joseph Bell showed a patient from whom he had removed the whole of the os calcis and a portion of the astragalus subperiosteally, the insertion of the tendo Achillis being preserved. The whole of the removed bone has been replaced by osseous growth from the periosteum, and a useful foot with normal movement at the ankle has been the result. Mr. A. G. Miller exhibited a patient suffering from ununited fracture of the scapula. The case was one of a severe railway injury, and there were complications in the shape of a dislocation of the shoulder joint and fractures in other parts of the body. The fracture of the scapula was recognised at the time of the accident, but the patient absolutely refused to submit to any retentive treatment. The symptoms which are present furnish some points of great interest in regard to a differential diagnosis. In one position of the parts the fracture closely simulates subcoracoid dislocation; there is flattening of the shoulder, and a slight forward bulging is seen immediately below the coracoid process. The distortion can, however, be completely removed by drawing the elbow upwards, and during this movement the tip of the coracoid process itself is felt to glide in an upward and inward direction. Whether the limb be in the distorted or in the natural position, the patient can perform all normal movements at the shoulder-joint. The movement of the coracoid process shows that it is involved in the fracture, and the diagnosis arrived at is that of a fracture of the surgical neck of the scapula, with stretching of the coraco-clavicular ligaments; the line of the fissure running through the supra-scapular notch and separating the coracoid process along with the glenoid cavity, as was described by Sir Astley Cooper. Mr. Joseph Bell showed a number of gall-stones removed by operation from an ulcerated gall-bladder, which communicated by a sinus with the external abdominal wall. Dr. Littlejohn, the president of the Society, exhibited a preparation of the air passages from a case of carbonic oxide poisoning, which illustrated the great congestion of the mucous surfaces present in that condition. Dr. R. Milne Murray then read his paper on the "Cessation of Respiration under Chloroform and its Restoration by a New Method." The paper was based on some important observations that he has made recently upon the administration of chloroform to rabbits. By means of an ingenious contrivance, Dr. Murray was able to regulate exactly the strength of the chloroform vapour which the animals inhaled. The effects on the respiration were recorded by a new method, in which a manometric recorder, indicating equal increments of pressure by equally increased excursions of the recording style, was substituted for the ordinary tambour recorder, which, after a certain degree of pressure is arrived at, fails in that respect. The readings from the recording apparatus were neatly mounted

for exhibition, and by passing them round amongst the members present many of the most important parts of the paper obtained remarkably clear illustration and confirmation. One point of great practical importance indicated by these graphic methods was that in deep narcosis the respiratory heavings of the thoracic walls may go on to all appearance perfectly, and yet absolutely no vapour enter or leave the chest. Dr. Murray considers this condition to be one of respiratory incoördination, the motor coördinating centre being affected, resulting in a "respiratory stammer," in which, although the thoracic walls rise, there is no depression of the diaphragm, but a contraction of the abdominal muscles, which nullifies the effect of thoracic expansion. As a result of his experience in cases of suspended respiration from the use of chloroform, Dr. Murray strongly insists on the importance of withdrawing the chloroform vapour from the lungs before commencing to introduce pure air. He advocates the introduction of a tracheal catheter in the human subject in such cases, and the removal by suction of as much of the vapour as possible before inducing artificial inspiration by the ordinary means. In rabbits he found that where this method was adopted resuscitation could be achieved even after a prolonged suspension of respiration, whereas were the ordinary means adopted, a successful issue was rarely attained.

IRELAND.

(From our own Correspondent.)

VISIT OF THE PRINCE OF WALES.

THE honorary degree of Doctor of Laws of the Royal University of Ireland was conferred on His Royal Highness last week; and on the same occasion the Princess of Wales received the honorary degree of Doctor of Music. At the University of Dublin an illuminated address was presented by the Senate of the University, and, at the request of His Royal Highness, the provost granted the undergraduates a term. Of the numerous addresses presented, I shall merely allude to those from the Royal College of Surgeons, the College of Physicians, and the Academy of Medicine. The address from the College of Surgeons alluded to the foundation of that institution by Royal Charter granted by George III., and stated that the College, unswerving in loyalty, uninfluenced by political or sectarian feeling, had never relaxed its efforts efficiently to discharge the trust confided to it by improving the profession, and thus promoting the welfare of the nation at large, and particularly by providing a sufficient number of properly educated surgeons, as well for the public in general as for the army and navy. The College of Physicians in their address referred to the satisfaction the visit of the Royal Family had produced, and alluded to the favour the Prince had always extended to their profession, as shown by the interest he had displayed in its efforts for the advancement of medical science and the preservation and improvement of the health of the nation.

HONOURS FOR THE MEDICAL PROFESSION.

It has been suggested that during the visit of the Prince of Wales to Ireland an opportunity will arise for the recognition of the long-deferred claims of the medical and surgical members of the profession in Dublin to the bestowal of honours by the Crown. Since the days of Sir Philip Crampton and Sir Dominic Corrigan, no surgeon or physician in this country has received a share of the numerous baronetcies bestowed by the Government; and this neglect has been a grave source of regret, as appearing to mark their inferiority as regards their English and Scotch brethren. It would be invidious for me to mention names, but there are several, both medical and surgical, who are eminently qualified for the honour in question.

RICHMOND DISTRICT LUNATIC ASYLUM, DUBLIN.

In the report of this asylum for the past year, Dr. Lalor, the resident physician, states that he has been enabled lately to carry out a useful measure in the separation of the epileptic from the general insane, and the grouping of a comparatively small class, consisting of them and the very aged and infirm, in a building to themselves, with access to the recreation rooms. Although the arrangement has only been a short time in operation, the beneficial results of the change have been acknowledged. The total cases under treatment during 1884 were 1519, the daily average being 1068; and it is interesting to note as an indication of the method of treatment that the daily average of patients employed in one way or another was 860.

RETIREMENT OF DR. BRODIE, LOCAL GOVERNMENT BOARD INSPECTOR.

At a meeting of the Poor-law medical officers of the Cork district, held on the 4th inst. at the Royal Cork Institution, Dr. Wycherly, J.P., High Sheriff, in the chair, the following resolution, proposed by Dr. O'Callaghan and seconded by Dr. Golding, was adopted:—"That the Poor-law medical officers of the Cork district cannot permit Dr. Brodie to sever his connexion with them without testifying in a proper manner their appreciation of his character as an inspector; that the necessary steps be taken to present Dr. Brodie with an address and testimonial on his retirement; and that Dr. Donovan be requested to act as secretary, and Dr. O'Connor, jun., as treasurer." Several who were unable to be present at this meeting have expressed their intention to co-operate in the movement.

ALEXANDER MEMORIAL PRIZE.

The triennial prize, founded in memory of the late Dr. Alexander, Director-General of the Army Medical Department, consists of a gold medal value £10, with £50 in money, and is open to competition by officers of the Army Medical Staff. This year it was gained by Surgeon John Martin, who is now in Egypt, for his essay on "Antiseptic Surgery, and its Application in Military Hospitals and in the Field." It is very creditable to Surgeon Martin, who is a native of Cork and received his professional education at the Queen's College, that this is the second occasion upon which he has obtained this distinction, the subject of his former essay having been "On the Influence of Drinking-water in causing Enteric Fever and Cholera."

Dublin, April 14th.

PARIS.

(From our Paris Correspondent.)

DEATH OF A LADY DOCTOR.

THE death of Mrs. Emilie Bovell-Sturge, Doctor of Medicine of the Faculty of Paris, and Officier d'Académie, occurred at Nice on the 2nd inst. Mrs. Bovell-Sturge began to study medicine at Edinburgh in 1871, but finding the way to successful study barred there, she went to Paris in 1873, where she took her degree in 1877. The subject of her thesis was "Les Phénomènes congestives consecutives aux Attaques de l'Epilepsie et de l'Hystéro-Epilepsie," for which she was highly complimented. After having obtained the Doctorate of Paris, she went to London to commence practice, and there married Dr. Allen Sturge. Soon after this she was appointed physician to the new Hospital for Women in the Marylebone-road, which post she held till she was compelled to leave London on account of her health, in October, 1881, when she was accompanied by her husband to Nice, where they both settled in practice. She has read papers at the Congrès d'Hygiène at Paris in 1878, on the Improved Industrial Dwellings in London; at that of the Hague last year on the method employed in England for dealing with the question of Pauper Children; and before the Société Médicale de Nice on "Some Points in the Pathology of Fibroid Phthisis." Mrs. Bovell-Sturge very modestly limited the sphere of her work to the diseases of women and children, without disconnecting herself from questions of general professional interest.

THE FRENCH SURGICAL CONGRESS.

The first Congrès Français de Chirurgie, which took place at Paris from the 6th to the 12th inst., was presided over by Professor Trélat. Before entering into the technical objects of the meeting, a discussion took place as to whether other cities than Paris could not be selected in rotation for the seat of the meeting. It was decided that Paris should be the constant *locale* of future congresses. Another question arose as to the period of the annual meeting, as that at which it has just taken place has for many reasons been found to be particularly inconvenient. It has therefore

been decided that it should be held in the second fortnight of October of each year. M. Trélat then addressed in neat terms a welcome to the foreign visitors, and passed in review the various discoveries which have actually renovated surgery, and given it an impetus which has been taken advantage of for the last twenty years. In doing this he recalled the discoveries of anæsthesia and of antisepsis, with which he connected the honoured names of Pasteur, Lister, and Alphonse Guérin. He showed that, thanks to these conquests, the limits of surgery have been considerably extended, and that the rightful claim of surgery to be an art based on science has been fairly established. He then inquired as to whether in this renovation and rapid extension, in which nations and individuals have made such gigantic strides, French surgery has in any way lost the high reputation it has hitherto held among other nations. The answer of course would be in the negative. In looking over the subjects that were discussed at the Congress, I cannot say that there has been anything particularly new or important brought forward.

THE INTERNATIONAL CONGRESS OF HYDROLOGY AND CLIMATOLOGY.

To your note in THE LANCET of last week on the International Congress of Hydrology and Climatology, which is to be held at Biarritz in October, 1886, I may add that for the sum of 12 francs anyone may become a member. Application should be accompanied by a post-office order for the above sum, which will entitle each member to—(1) the documents relative to the different sections of the Congress, to the subjects that will be brought before it, and to a detailed plan of the excursions; (2) a card giving members the right to travel by rail to Biarritz at a reduced fare of 50 per cent.; (3) a memorandum giving a detailed account of the price of lodgings, &c. The Committee of Organisation particularly requests that those desirous of becoming members should make known their intention as soon as possible. Further information may be obtained from Dr. Durand-Fardel of Paris, or from Dr. Garrigou of Toulouse.

Paris, April 14th.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Acts Amendment Bill.

OWING to the absence of the Lord Chancellor from the House of Lords this week, in consequence of the decease of the Countess of Selborne, the second reading of the Lunacy Acts Amendment Bill has been postponed until Tuesday next.

On Monday, the Burgh Police and Health (Scotland) Bill was read a second time.

Over-pressure in Elementary Schools.

In the House of Commons on the 13th inst., Mr. Talbot moved an address to the Crown praying that a larger proportion of the grant now given to public Elementary Schools should be allotted in the form of a fixed payment on average attendance. By this distribution of the grant he contended that over-pressure in elementary schools would be prevented. Mr. R. Paget seconded the motion, which was strongly opposed by Sir L. Playfair, who asserted that its effect would be to increase the remuneration of bad schools and to decrease the payments for good schools. After some remarks from Lord G. Hamilton, Mr. Forster, and Mr. J. A. Campbell, Mr. Mundella maintained that to secure good teaching there must be some testing of results, and this could only be done by individual examination. There was no new departure in the Code, and no Code had ever been so threshed out as this. It had received universal assent, and, whatever its defects, more thorough work was being done and better grants were being earned under it than under any previous code. In like manner, he contended payment by results had secured good teaching without interfering with freedom of action on the part of teachers and managers. He dwelt upon the large and increasing sums annually spent on education, and contended that State aid must be administered under State control. As to over-pressure the weight of evidence was, he stated, all the other way. On a division the motion was negatived by 117 to 53.

The Contagious Diseases Acts.

On the 14th inst., in reply to Mr. Bulwer, who asked the Secretary for War whether it was a fact that the number of soldiers serving at home admitted to hospital for venereal disease had during the past year largely increased and was still increasing, and whether he had any objection to lay upon the table of the House a return similar in form and detail to, and in continuation of, that presented to the House on the 3rd of March, 1884, showing the number of soldiers admitted to hospital for venereal disease since the end of the year 1883, Sir A. Hayter stated that there has been an increase of admissions to hospital for the cause referred to in the districts formerly protected from 110 per 1000 in 1883 to 135 per 1000 in 1884. The return in continuation of that presented in 1884 would be given if moved for.—Mr. Cavendish-Bentinck asked whether in the return about to be laid upon the table the War Office will distinguish between the various forms of venereal disease, so as to show the proportions in which the soldiers have been affected during the past year, and on this point Sir A. Hayter promised to make inquiry.

Medical Officer of Health for Cheltenham.

On Thursday, Mr. J. Campbell having asked the Secretary of the Local Government Board if he could state the result of his inquiries into the circumstances of the recent appointment of a medical officer of health by the Town Council of Cheltenham, Mr. G. W. E. Russell said he had obtained further particulars as to the appointment of Mr. Roch. It was true that when he was appointed he had a surgical qualification only. The regulations of the Board require that unless they dispense with the requirement, a medical officer of health shall possess both a medical and surgical qualification, and in the case of a borough such as Cheltenham they would not have consented to the office being held by a medical man with one qualification only; but Mr. Roch, about three weeks before the date when he was to enter upon his duties, obtained the requisite medical qualification. The Town Council, when this further qualification had been obtained, ratified the election by formally applying to the Board to dispense with the requirement referred to, so far as was necessary, in consequence of Mr. Roch not actually possessing at the time of the election the double qualification. The Board had complied with their request, and have sanctioned the appointment.

Obituary.

EDWARD WELLS, M.D. OXON.

WE regret to have to record the death of Dr. Wells of Reading, senior physician to the Royal Berkshire Hospital. Till three weeks ago Dr. Wells was fully engaged in the active duties of his profession, and it was hoped that a change to the Isle of Wight and rest from arduous duties would restore his broken health. He graduated at Oxford in 1840, and was Radcliffe travelling fellow of the University. After three years' professional study on the Continent he settled at Reading, in succession to the late Dr. Smith, father of the well-known Goldwin Smith. As physician to the Reading Hospital and Dispensary he was much beloved by the poor. Among his professional brethren he was highly esteemed, not in the town only but throughout Berkshire, and had accorded to him very rightly the honourable position of the principal consulting physician in the county. His education at Winchester and Oxford gave him many friends of position, but it was chiefly his gentle and pious nature which endeared him so much to his professional brethren and all who had the advantage of his acquaintance.

EDWARD DAVY, M.R.C.S.

ON January 26th, the death occurred at Malmesbury, Australia, of Mr. Edward Davy, whose name has been recently before the public as the discoverer of the "relay" system, which had an important influence in the development of the electric telegraph. Born at Ottery St. Mary, Devon, in 1806, he studied at St. Bartholomew's Hospital, obtained the licence of the Society of Apothecaries in 1828, and became a Member of the Royal College of Surgeons in 1829. He then commenced the practice of his profession; and it was not until 1836 that he first experimented in electric telegraphy. Mr. Fahie's articles in the *Electrician*

in July and August, 1883, and his "History of Electric Telegraphy," published by Spon (London) last year, do ample justice to Mr. Davy's early inventions and their importance in developing the practical use of electric telegraphy. In 1839 Mr. Davy emigrated to South Australia, going out in medical charge of an emigrant vessel. He contemplated pastoral pursuits, but soon abandoned the idea, and in 1843-45 was engaged as editor of the *Adelaide Examiner*. In 1848 he undertook the management of the Yatala smelting works. In 1852 he took charge of the Government Assay Office in Adelaide, and in 1853 he organised and took the management of a similar establishment in Melbourne. The Assay Department was at the end of the following year abolished, and Mr. Davy removed to Malmesbury, where the remainder of his life was spent. He took an active part in local affairs, was for many years a member of the borough council, was several times mayor, and was for more than twenty years an active justice of the peace.

GEORGE SANKEY, M.R.C.S., L.S.A.

WE regret to record the death of Mr. George Sankey, one of the most honoured and respected members of the profession in Maidstone. Mr. Sankey had been in failing health for some months, and was advised to take a voyage to Australia to recruit his strength. He started from Gravesend in the *Chimborazo* on January 8th, and experienced very rough and cold weather, owing to which an attack of pneumonia demonstrated itself, and death resulted during the passage of the ship through the Red Sea.

Mr. Sankey received his medical education at St. Thomas's Hospital. He became a member of the Royal College of Surgeons and licentiate of the Apothecaries' Society in 1854. He was appointed senior surgeon of the Army Works Corps in the Crimea, and on his return to England settled in Maidstone, where he rapidly acquired a large practice. In 1870 he was appointed surgeon to the West Kent General Hospital, and after holding this important office for twelve years became consulting surgeon, which post he held till his death. His sterling integrity won for him a large circle of friends amongst his professional brethren and the general public.

Medical News.

PRINCESS CHRISTIAN, of Schleswig-Holstein, paid a visit on the 15th inst. to the London Hospital.

THE fund raised up to the present time for the erection of a hospital at Port Said, as a national memorial to General Gordon, amounts to between £14,000 and £15,000.

NORTH-EASTERN HOSPITAL FOR CHILDREN.—The Princess of Wales will open a bazaar on behalf of the funds of this hospital on June 24th next, at the Cannon-street Hotel.

VACCINATION GRANTS.—Dr. Newham, of Winslow, (ninth time), and Dr. P. L. Benson, of the Buckingham Union, have received the Government grants for successful vaccination.

MR. FRANCIS WICKSTEED, M.R.C.S., L.S.A., Consulting Surgeon to the Weston-super-Mare Hospital, has been elected by the ratepayers a Member of the Weston Local Board of Health.

ROYAL COLLEGE OF SURGEONS.—The Library of this institution will be closed on Tuesday next, the 21st inst., owing to the large number of candidates who have entered their names for examination for the diploma of Membership of the College, amounting, we are informed, to 270.

THE WATER-SUPPLY OF LINCOLN.—An exhaustive report in reference to the water-supply of Lincoln has been presented to the corporation of the city by Dr. Harrison, the medical officer of health. The conclusions at which he arrives are:—(1) That the water, after filtration, as supplied, contains an excess of organic matter, making it only a second-class water. (2) That the sources of the water are polluted by drainage from land highly cultivated and occasionally manured with nightsoil; water from such a source is dangerous. (3) That the quantity available is not sufficient for the wants of the city. (4) That the filter-beds are capable of filtering more than a million gallons daily. (5) That it is not advisable to take the water from the River Witham for the supply of the city.

LARGE BEQUESTS TO HOSPITALS.—A bequest of £10,000 has been made to the Durham Infirmary by the late Mr. J. Eden, of Beamish-park, near Durham.—The late Captain Perry, of the Wergs Hall, has left £5000 to the Wolverhampton and Staffordshire General Hospital, and £250 to the Wolverhampton Eye Infirmary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—The Prince of Wales has consented to open the new building attached to this hospital during the month of June next. The new hospital, of which the west block forms a memorial to the late Duke of Albany, has been erected at a cost of nearly £80,000, of which all but a balance of £6500 is provided.

SEWAGE WORKS AT BUXTON.—On the 9th inst., the new sewage works, which have been recently erected at Buxton at a cost of about £4000, were formally opened. The works have been constructed for the purpose of treating the town sewage by precipitation with iron-water and lime, the iron-water being conveyed from a disused colliery at the foot of the Axe Edge hills.

GLASGOW UNIVERSITY MEDICO-CHIRURGICAL SOCIETY.—At the annual business meeting of this Society, the following were elected office-bearers for next session:—Honorary President: Professor Leishman, M.D. President: John Macphail. Vice-Presidents: Senior, John H. Carslan, M.A.; Junior, Basil J. Adam. Secretaries: Corresponding, William H. Fergus; Minute, Henry J. Younger, M.A. Treasurer: Arthur D. Hughes. Librarian: William B. Leishman.

SEAMEN'S HOSPITAL SOCIETY.—At a recent quarterly court of the governors of this Society, the Committee reported that the drainage works, now being carried out for the purpose of placing the building in a sanitary condition, are progressing favourably, while the chapel is completed externally. To meet this expenditure the committee have been obliged to sell a further £2000 worth of stock, and contributions in aid of the special fund for drainage improvements and the chapel are urgently needed.

NEW WORKHOUSE FOR THE HOLBORN UNION.—On the 14th inst., the foundation-stone of a new workhouse for the Holborn Union was laid by Mr. Garrod, chairman of the Board of Guardians. The building will accommodate 1000 able-bodied poor, and is to take the place of the recently demolished workhouse in the Farringdon-road, and the institution in Gray's-inn-road, which it is expected will in a short time be condemned. The new erection is situated near Tooting, and is estimated to cost £65,000, which will include the furnishing.

IN MEMORIAM: SAMUEL RABBETH.—A handsome brass tablet to the memory of the late Samuel Rabbeth, M.B., was on Saturday last placed by the Committee of Management in the inquest-room of the Royal Free Hospital. The tablet bears the following inscription:—"This tablet has been erected by the authorities of the Royal Free Hospital (Gray's-inn-road) and the medical staff to the memory of Samuel Rabbeth, M.B., M.R.C.S., senior resident medical officer of this hospital, who sacrificed his own life in the endeavour to save that of a little child, a patient under his care. Died October 20th, 1884; aged twenty-six years."

UNIVERSITY OF OXFORD.—The Regius Professor of Medicine has given notice that Examinations for the degree of Bachelor of Medicine will commence in the Medical Department of the Museum as follows:—The second (or final) examination, Monday, June 8th, at 10 A.M.; the first (or scientific) examination, Friday, June 19th, at 10 A.M. Candidates for either of these examinations are requested to send in their names on or before May 23rd, to "the Regius Professor of Medicine, Medical Department, Museum, Oxford." Candidates for the Scientific Examination are to state whether they have passed the Preliminary Honour Examination in the School of Natural Science; and, if not, whether they desire to present themselves for Physics and Chemistry only at this examination, or for all the subjects thereof.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY. At a meeting of the Committee of Management of this institution held on the 4th inst., it was stated that during the three months ending the 31st ult., 336 in-patients were admitted, or within two of the number admitted during the corresponding quarter of the previous year. The number of out-patients treated was twenty-two. The receipts were larger than in the corresponding quarter of last year, but it was found necessary to draw £500 from the reserve fund to defray the cost of the reconstruction and repairs of the inadequately completed works of the hospital extension.

SHOCKING OCCURRENCE IN A FRENCH HOSPITAL.—On the 7th inst., one of the fever patients at the Tenon Hospital was suddenly seized with a fit of raving madness, and escaped on to the roof of the building, whence an attendant who had followed him endeavoured to compel him to return. A desperate struggle ensued, but the patient broke away and jumped to the ground, where he was afterwards found frightfully mutilated and inanimate. The attendant only saved himself from the same terrible fate by clinging with one hand to the stack-pipe until he was rescued by his companions.

LUNACY IN LANCASHIRE.—From a return just issued by the clerk to the Rainhill Asylum, it appears that there were on January 1st last 8178 pauper lunatics, idiots, and persons of unsound mind in Lancashire. Four classes of persons furnish very nearly one-fifth of the whole number of asylum inmates—viz., factory operatives 268, labourers 243, domestic servants 184, and housekeepers 456, making a total of 1151. The highest percentage of lunacy occurs in the Manchester Union, being 4·025 per 1000 of the population on the census of 1881; and the lowest occurs in Barrow, where it is ·740.

INFIRMARY NURSES AND MEDICAL TEACHING.—A few months back, at the request of Dr. Neale, the Board of Guardians for the Wandsworth and Clapham Union voted a sum of money for the purchase of a skeleton and physiological diagrams, in order that the nurses of the infirmary might receive physiological instruction. On the 9th inst., at the close of the ordinary business of the board, Dr. Neale stated that he had given some twenty demonstrations to the nurses, who had attended well and taken an intelligent interest in the lessons. He had held a written examination, and both himself and Dr. Wilson were surprised at the proficiency shown by the pupils. The examination was a severe one, and both in that and practical work, such as bandaging &c., the nurses had made remarkable progress. Prizes were then presented to the four candidates who were most successful in the examination.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the monthly meeting of the members of this Association, held on the 9th inst., a resolution was proposed by Dr. Vacher (hon. sec.), seconded by Dr. Kenyon (Chester), and carried, expressing regret that the medical officer of health of St. Pancras (Mr. Murphy) had felt himself compelled to resign his post "in consequence of the hostility of certain members of his vestry rendering it impossible for him to carry out his duties conscientiously and impartially," and asking for the intervention of the Local Government Board, to prevent the loss of this gentleman's services.—Dr. Hime then delivered his inaugural address, which was mainly devoted to the subject of cholera bacillus. He illustrated his remarks by mounted specimens of the bacillus placed under the microscope, and a short discussion followed.—A paper on "The Tenure of Office by Medical Officers of Health" was afterwards read by Mr. J. R. Phythian.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ABBOTT, C. E., M.R.C.S.E., L.K.Q.C.P.I., has been reappointed Medical Officer of Health for the Braintree Rural Sanitary District.

ALLOTT, JAMES H. L., M.B., C.M.Ed., has been appointed House-Surgeon to the Dewsbury and District General Infirmary, Dewsbury.

ASHE, WM. CONYNGHAM, L.R.C.S.I., has been appointed Medical Officer to the Newcastle Hospital, New South Wales.

BATTEN, JOHN, L.F.P.S.Glas., L.R.C.P.Ed., has been appointed Medical Officer for the Church Eaton District of the Cannock Union, vice Baddeley, resigned.

BROWN, JAS. WM. H., L.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the West District of the Holbeck Union, vice Dobson, deceased.

CLIFFORD, WILLIAM, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the Adare Dispensary, vice Shanahan, resigned.

COOPER, ARTHUR, M.R.C.S., has been appointed Surgeon to the Westminster General Dispensary, vice Barron, resigned.

FORBES, ARMITAGE, L.R.C.P.Ed., L.R.C.S.I., has been appointed Government Medical Officer and Public Vaccinator for the Tweed River District, New South Wales.

HAWKINS, FRANCIS HENRY, M.B.Ed., &c., has been appointed Assistant Physician and Registrar to the Hospital for Epilepsy and Paralysis, Portland-terrace, Regent's-park.

HEATH, JAMES, M.B.Ed., has been appointed Senior House-Surgeon to the Torquay Hospital, Torquay, vice Thistle, resigned.

MURRAY, CHAS. STORMONT, F.R.C.S.I., L.S.A.Lond., has been appointed Administrator of Anæsthetics, Samaritan Free Hospital.

O'REILLY, WALTER W. JOSEPH, M.D., M.Ch.Dub., M.R.C.S., has been appointed Honorary Physician to the Sydney Hospital.

WARDLE, MARK ANTHONY, L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer for the Bishop Auckland District and Workhouse, Auckland Union, vice Hutchinson, deceased.

WHITTON, THOS. BAIN, M.D., L.R.C.S.Ed., has been appointed Surgeon to the Reefton Hospital, New Zealand.

YARROW, GEO. EUGENE, M.D.Heid., M.R.C.P.L., M.R.C.S., has been appointed Medical Officer for St. Luke's Parish, Holborn Union.

Births, Marriages, and Deaths.

BIRTHS.

BREWER.—On the 11th inst., at "Cairn," Richmond-road, E., the wife of A. H. Brewer, L.R.C.P.L., &c., of a daughter.

DUKE.—On the 10th inst., at Locksley, Freshwater, Isle of Wight, the wife of Edgar Duke, M.R.C.S. Eng., L.S.A.Lond., of a daughter.

DUNCAN.—On the 11th inst., at 6, Harley-street, Cavendish-square, W., the wife of William A. Duncan, M.D., F.R.C.S.Eng., of a daughter.

FINLAY.—On the 1st inst., at Montagu-street, Portman-square, W., the wife of David W. Finlay, M.D., M.R.C.P., of a daughter.

PEARCE.—On the 8th inst., at The Manor House, Brixton-rise, S.W., the wife of Chaning Pearce, M.D., of a son.

POWELL.—On the 10th inst., the wife of R. Douglas Powell, M.D., F.R.C.P., of a son.

UHTHOFF.—On the 7th inst., at Western-road, Hove, Brighton, the wife of John Caldwell Uhthoff, M.D., of a daughter.

MARRIAGES.

BRUCE—COLLINGRIDGE.—On the 8th inst., at St. Mary's, Hornsey, by the Rev. F. H. Dalby, M.A., brother-in-law of the bridegroom, assisted by the Rev. J. Jeakes, M.A., Rector of the Parish, Robert Bruce, M.R.C.S., of the City-road, E.C., to Emma, the second daughter of William Hill Collingridge, of Hornsey, N.

DEANE—PLANCK.—On the 2nd ult., at Holy Trinity Church, Allahabad, India, by the Rev. A. O. Hardy, M.A., Andrew Deane, M.D., F.R.C.S.I., Surgeon-Major Bengal Medical Service, Civil Surgeon, Cawnpore, N.W.P., to Lilian Annie, only daughter of Chas. Planck, F.R.C.S.E., Deputy Surgeon-General Bengal Medical Service, Sanitary Commissioner and Inspector-General of Vaccination, North-west Provinces and Oudh.

HUMPHREYS—SPOTTISWOODE.—On the 8th inst., at St. Mary's, Oatlands, Francis Rowland Humphreys, L.R.C.P., &c., of Queen's-crescent, Haverstock-hill, to Cecilia Mainie Spottiswoode, youngest daughter of the late Major-General Spottiswoode, 37th B.N.I.

PENNY—TAIT.—On the 7th inst., at St. Mark's, Tollington-park, Dr. Charles Hall Penny, of Enfield, to Emily Mary, daughter of the late Greville Ewing Tait, M.R.C.S., and granddaughter of the late Rev. A. S. Acheson, Rector of Teigh, Oakham.

PLUCKER—KIRKPATRICK.—On the 7th inst., at the Church of the Resurrection, Brussels, Theodore Plucker, M.D., Professor of the University of Liège, to Mary Eliza Caroline, eldest daughter of W. H. Kirkpatrick.

STORRY—SCOTT.—On the 8th inst., at St. Thomas's, Haverfordwest, by the Rev. G. C. Hilbers, assisted by the Rev. J. Popkin Morgan, cousin of the bride, Frederick William Storry, M.R.C.S., of Strond, Gloucestershire, eldest son of Edwin Storry, of Howden, Yorkshire, to Beatrice Eliza, second daughter of the Rev. William Scott, Vicar of Slebech and Minwere, and late Head Master of Haverfordwest Grammar School.

TIRARD—BELOE.—On the 8th inst., at Holton St. Peter, by the Rev. Henry Ryder Ware, uncle of the bride, Nestor Isidore Charles Tirard, M.D.Lond., Professor of Materia Medica, King's Coll., Lond., to Helen Mary, second daughter of the Rev. Robert Seppings Beloe, Rector of Holton St. Peter, Suffolk.

DEATHS.

SMITH.—On the 12th inst., at Greenhill, Weymouth, William Johnson Smith, M.D., aged 72.

TIBBITS.—On the 14th inst., at Bradford, Yorkshire, E. T. Tibbits, M.D., London, fourth son of Thomas Tibbits, 29, Burlington-road, Clifton, aged 45.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

APPLETON & Co., New York.
The Story of My Life. By J. Marion Sims, M.D., LL.D. Edited by his Son, Dr. H. Marion Sims. pp. 471.
A Manual of Dermatology. By A. R. Robinson, M.B., &c. pp. 647, with 88 Illustrations.

BAILLIÈRE ET FILS, Paris.
Nouveau Dictionnaire de Médecine et de la Chirurgie Pratiques. Tomes xxxvi., xxxvii. pp. 847—907.
Leçons Cliniques sur les Maladies des Voies Urinaires. Par Prof. Félix Guyon. Deuxième Edition, revuée et augmentée. pp. 1084, avec 49 Figures.

BAILLIÈRE, TINDALL, & COX, London.
On Bronchial Asthma (Lettsomian Lectures.) By J. C. Thorowgood, M.D. Second Edition. pp. 91.
The Student's Guide to the Medical Profession. By C. B. Keetley, F.R.C.S. Second Edition. Edited by the Author and Robt. Wharry, M.D. pp. 122.

BLAKISTON, SON, & Co., Philadelphia.
Transactions of the American Surgical Association. Edited by J. Ewing Mears, M.D. Vol. II. pp. 581, with Illustrations.

CHURCHILL, J. & A., London.
The Student's Guide to Clinical Medicine and Case-taking. By Francis Warner, M.D.Lond., F.R.C.P. Second Edition. pp. 211.
The Pharmacopœias of Twenty-five of the London Hospitals. By Peter Squire. Fifth Edition, revised by P. W. Squire and A. H. Squire. pp. 317.
Operative Surgery in the Calcutta Medical College Hospital. By Kenneth M'Leod, A.M., M.D., F.R.C.S.E. pp. 351, with Plates.
Endemic Goitre or Thyrocele. By Wm. Robinson, M.D., M.S. pp. 66.

HAMILTON, ADAMS, & Co., London.
Lateral Curvature of the Spine. By Wm. J. Tivy, F.R.C.P. Ed. pp. 72.

HIRSCHWALD, A., Berlin.
Klinische Beiträge zur Kenntnis der Aktinimykose des Menschen. Von Dr. J. Israel. S. 152.

KEGAN PAUL, TRENCH, & Co., London.
The Common Sense of the Exact Sciences. By the late W. Kingdon Clifford. pp. 271, with 100 Illustrations.

LEA BROTHERS & Co., Philadelphia.
Lectures on Diseases of the Nervous System, especially in Women. By S. Weir Mitchell, M.D. Second Edition, Revised and Enlarged. pp. 287, with 5 Plates.

LONGMANS, GREEN, & Co., London.
Transactions of the National Association for the Promotion of Social Science. Birmingham Meeting, 1884. pp. 783.
Transactions of the Obstetrical Society of London. Vol. xxvi. pp. 375, with Illustrations.
Civilisation and Progress; being the Outlines of a New System of Political, Religious, and Social Philosophy. By J. Beattie Crozier. pp. 463.

LONDON LITERARY SOCIETY.
Darius the Median identified, or the true Chronology of the Ancient Monarchies recovered. By Charles Pulkes Watson. pp. 249.

PUTNAM'S SONS, New York & London.
The Social History of the Eighth International Medical Congress. By D. B. Delavan, M.D. Second Edition. pp. 36.

SMITH, ELDER, & Co., London.
A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, M.D., LL.D. Seventh American Edition. pp. 1005, with 379 Woodcuts.

ULLASTRES, BYARISTO, Barcelona.
Tratado Iconografico de las Enfermedades Externas del Organo de la Vision. Por el Dr. Juan Gelpí y Jofre. Contiene 20 láminas con 108 oleografias.

Help at Hand; by Countess Cowper.—Deutsches Archiv für Geschichte der Medicin und Medicinische Geographie VIII.; herausgegeben von H. Rohlfs. (Hirschfeld, Leipzig.)—De las Fiebres de Borras ó Calenturas Malas de las Antillas; dor el Dr. A. W. Reyes.—Typhoid Fever in the Young; by A. Jacobi, M.D.—The Spinal Arthropathies; by A. Sydney Roberts, M.D.—Du Traitement Rationnel de l'Affection Furonculeuse; par le Dr. Gingeot.—Etudes Thérapeutiques sur l'Antipyrine; par Henri Huchard. (Doin, Paris.)—Die Thatsachen der Vererbung in Geschichtlich-Kritischer Darstellung; von Dr. Emanuel Roth. (Hirschwald, Berlin.)—Vorwort und Einleitung zum Bericht über die Allgemeine deutsche Ausstellung auf dem Gebiete der Hygiene und des Rettungswesens unter dem Protectorate I. M. der Kaiserin und Königinn; herausgegeben von Dr. Paul Boerner.—Indexes of Patents and Patentees in Victoria, Vols. XIII. & XIV.—Beiträge zur Kenntnis der Micrococcencolonien in den Blutgefässen bei Septischen Erkrankungen; von Dr. J. Ziemacki.—Sanitary Inspection of Houses and Premises. Illinois State Sanitary Survey.—Force *v.* Work; by Wm. Pepper, M.D.—Die Spaltzpilze; Die Pilzthiere oder Schleimpilze; von Dr. W. Zopf. (Trewendt, Breslau.)—Zur Theorie der Heilwirkung des Franzensbader Moores; von Dr. C. Reinl.—Man: Whence and Whither? by H. J. Hardwicke, M.D.—Unusual Cases of Vesico-vaginal and Vesico-uterine Fistula; The Use and Abuse of Battey's and Tait's Operations; by W. H. Baker, M.D. (Boston, Stanley and Usher.)—Aneurysms of the Aorta; by Oswald Browne, M.B.

Medical Diary for the ensuing Week.

Monday, April 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Mitchell Banks: On the Treatment of Gangrenous Intestine in Strangulated Hernia, with a successful case of Resection of the Small Bowel.—Dr. Herbert Snow: On the Free Use of Caustic Potash in the Treatment of Cancer of the Cervix Uteri.

Tuesday, April 21.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Lane: Three cases of Displacement of the Lumbar Vertebræ.—Dr. Turner: (1) Tumours in Adrenals (card); (2) Suppuration of Simple Fracture of the Hyoid Bone (card).—Dr. Goodhart, for Dr. Handfield Jones: The Cerebral Arteries in states of Congestion.—Dr. Willcocks: A case of Hypospadias.—Dr. Percy Kidd: Destructive Disease of the Lung.—Dr. Allchin: Acute Ulceration of the Colon.—Dr. Silcock: Enterocolitis (card).—Dr. Goodhart: Specimens of Enteritis and Colitis (card).—Mr. Battle: Cyst growing from the Wall of the Intestine.—Mr. J. Hutchinson, jun.: Hydrocele of the Cord.—Mr. Bruce Clarke: Two cases of Gastrostomy.—Dr. Heib: Aortic Valvulitis, with Embolism of a Coronary Artery and Middle Cerebral (card).—Mr. Shattock: Fracture of the Superior Cornua of the Thyroid Cartilage (card).—Dr. Chaffey: Solitary Kidney (congenital) (card).—Dr. Hale White: (1) Enormous Hypertrophy of the Heart (card); (2) Large Triple Phosphate Renal Calculus (card).—Dr. Pitt: (1) Sarcoma of Petrous Bone, Cerebellum, and Naso-pharynx (card); (2) Syphilitic Ulceration of Larynx and Trachea (card).—Dr. Hadden: (1) Broad Ligament Cyst containing Coagulated Albumen (card); (2) Ulceration of Intestine originating in Hæmorrhage (card).

Wednesday, April 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Conversazione.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. More Madden (Dublin), Mr. Reeves, and Dr. Fancourt Barnes.—Dr. More Madden: On some Points in the Treatment of Fibro-myomata.—Dr. Chalmers: Gangrene of the Vulva.

Thursday, April 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall: Natural Forces and Energies.
THE PARKES MUSEUM OF HYGIENE.—8 P.M. Sir Spencer Wells, Bart.: Cremation.

Friday, April 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Papers by Dr. Burch and Mr. F. Cheshire.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Sidney Phillips: A case of Sporadic Cretinism.—Mr. Walsham: Ligature of the External Iliac Artery, with two Kangaroo-tail Ligatures and Division of the Artery between them, suppuration of the sac, ultimate recovery.—Dr. Dickinson and Mr. Rouse: A case of Renal Lithotomy.—Dr. Hadden: A case of Obstruction of Arteries and Veins extending over many years.—Mr. J. R. Lunn: Four cases of Osteitis Deformans (living specimens).—Mr. R. W. Parker: A case of Thyrotomy with Preservation of Voice (living specimen).—Dr. Stephen Mackenzie: (1) A case of Osteitis Deformans; (2) A case of Hereditary Multiple Tumours (living specimens).
ROYAL INSTITUTION.—9 P.M. Mr. W. Carruthers: British Fossil Cycads.

Saturday, April 25.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. W. Carruthers: Fir-trees and their Allies.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, April 16th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 10	29·55	N.W.	42	40	...	45	40	·02	Raining
,, 11	29·64	N.E.	43	41	80	51	41	·07	Cloudy
,, 12	29·85	E.	45	42	89	56	40	...	Cloudy
,, 13	29·97	N.E.	41	40	70	51	39	...	Overcast
,, 14	29·92	E.	41	40	78	51	38	...	Cloudy
,, 15	29·90	E.	43	40	88	55	40	...	Overcast
,, 16	29·73	E.	44	44	...	...	42	·70	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

WAR WITH NATURE.

AT the commencement of the war in the Soudan we called attention to the uselessness of a contemplated occupation of the Soudan by Europeans. In the House of Commons on Monday, the 13th, Lord Randolph Churchill repeated this fact, stating that from a personal visit he had gathered that our troops were suffering terribly from the effects of the climate. This will prove *our* conqueror, even if we should succeed in "smashing the Mahdi."

Publicity.—The discreditable practice is one with which the corporations alone can effectually deal.

"OVERWORK IN TELEGRAPH OFFICES."

To the Editor of THE LANCET.

SIR,—I read with interest an annotation under the above heading in your issue of the 28th ult.

A few days before the late Postmaster-General expired I had written to him stating the case of my daughter, who was in the service in a provincial city, and drawing his attention to the hours of labour at that office—9 A.M. to 5 P.M. or 10 A.M. to 6 P.M., with only an uncertain fifteen minutes between those hours for lavatory and a scrap refreshment, and in the twelve months a fortnight's holiday. She was admitted into the service after receiving a medical certificate of good health. Mental strain to excel in the various complicated systems continuously cropping up in the service often caused complainings of debility. To have gone on sick-leave meant half salary, with no private resources to fall back upon; so she continued at work till ultimately she broke down, and for weeks lay between life and death. She is still in the service, but suffers much from impaired health and broken constitution. Some initiatory step was the result of my letter to Mr. Fawcett, and inquiries were at once instituted in the office at which my daughter was employed. I did not hear officially on the matter, and suppose the sudden death of the Postmaster-General broke the thread of my appeal for amelioration of the rule in that office—fifteen minutes for hasty refreshment and half salary when stricken down, or when rest is deemed a necessity to put off a total breakdown. I am, Sir, yours obediently,

April 4th, 1885. FATHER.

"CONSCIENCE MONEY."

To the Editor of THE LANCET.

SIR,—The following is probably a rare, if not a unique, experience in these hard times. My partner amongst his letters found an envelope with a five-pound note enclosed in a sheet of writing-paper, on which was written, "Conscience Money." There were some initials in the corner of the paper, but they were so minute that they could not be deciphered even under a "high power."

I am, Sir, yours truly,

Fyfield, near Andover, April 11th, 1885. W. J. H. LUSH, M.D.

PUBLIC GARDENS AND PLANTATIONS OF JAMAICA.

THE annual report of the public gardens and plantations for the year 1884 has just been issued by Mr. Morris, the director of these plantations. It contains much valuable information, and shows the state of the experimental cinchona plantations carried on by Government for the purpose of the scientific culture of different species of cinchona and for supplying seeds, seedlings, and plants to private planters. As regards the present position of cinchona cultivation, the market would appear to be in a very depressed state, and the prospects of the cinchona planter not of a very encouraging character. It should be remembered, however, that the whole history of the quinine market is one of numerous fluctuations.

Qualified Assistant.—There are legal points to be considered by the practitioner, though they are more or less at the discretion of the presiding judge, who might see fit to dispense with the presence of the qualified assistant as a witness.

P. W. M.—The paper is marked for early insertion.

"AN EL DORADO FOR MEDICAL MEN."

To the Editor of THE LANCET.

SIR,—We of the profession here derived considerable amusement from the perusal of the sensational annotation with the above heading, which appeared in your issue of Jan. 24th. But in case the brilliant and dazzling array of fees therein contained should tempt some rash and adventurous spirits to plunge into the unknown wilds of the Argentine Republic in search of patients, practice, and *pesos* (dollars), perhaps you will allow me to correct some of these figures and to sound a slight note of warning. The only correct figures are 8s. for a consultation at the doctor's house, 16s. for a visit to the patient's house, and £20 for a confinement without operations (midwifery fees are high, because midwives are universally employed, and but a small proportion of cases are attended by doctors). The other tremendous fees tabulated I happen to know were actually paid, but it was in solitary and particular cases only.

An item also much exaggerated is that of £20 and upwards for consultation, the consultation fee fixed by law being £4 for each doctor at each consultation. As the people here are more nervous and apprehensive, consultations are much more indulged in than at home. In fact, the ordinary routine work of the general practitioner is so badly paid for that without consultation it would be difficult for the doctor to make both ends meet. The man who is thoroughly appreciated here and whose work is always well paid, is the skilled operating surgeon; £100 would be an ordinary tracheotomy fee, and £150 or £200 the fee for excision of the breast. Eye specialists also command good practice and good fees.

Per contra, we have the expense of living, which is very high in this city. A small house in the centre will cost from £250 to £300 per annum, and a couple of servants another £100; food is cheap, but everything else extremely dear. Again, there is a large and flourishing medical school here which turns out some forty or fifty medical men every year, and, although the native doctors are uniformly most courteous and tolerant, still they invariably call in their own set to consultations, except the family insist on the presence of a foreign doctor. Besides this, a thorough knowledge of Spanish is necessary before starting, and the candidate must have a university degree, M.B. or M.D., as the Faculty here will not accept the ordinary double qualification; diplomas must also be revised by the Argentine Consul in London before you come out.

Fulfilling all these conditions, and with a good medical education to fall back upon, a steady English gentleman will find here a hearty welcome, a hospitable land, and a warm-hearted and generous people. But let him beware of the thousand pound gentlemen, and let him be cautious about taking gratuitous advice from even such a highly respectable journal as the *South American Journal*. Apologising for this lengthy communication, I remain, Sir, yours very truly,

Buenos Ayres, Feb. 28th, 1885. VERITAS.

M.B.—If a police-surgeon is called to attend a prisoner at the instance of the police, he is clearly justified in demanding the usual fee. If his advice is sought at the instance of the prisoner, he has no legal claim against the authorities. It behoves a medical man to satisfy himself of the facts before rendering professional aid to a person in charge of the police.

IRON HOUSES.

To the Editor of THE LANCET.

SIR,—I should be obliged if any of your readers could give me any definite information with regard to iron houses from a hygienic point of view. The advantages are obvious; durability, economy, rapidity of erection, and portability, if I may use such a term concerning what is commonly considered a fixture, it being understood that the houses meant are of the cottage or bungalow type and of small size. Theoretically, of course, a residence with iron shell is not healthy, being hotter in summer and colder in winter than brick or stone; *per contra*, no damp or wind can penetrate. Again, are there means of avoiding the extremes of temperature induced by the non-conductor, such as felt or wood lining, or coating of composition, or the like? Many such additions are recommended by builders, but are they really trustworthy? Some practical hints from men who have lived in these houses will be useful to myself, and probably others. I am, Sir, yours faithfully,

April 7th, 1885. COUNT.

PROFESSIONAL EDUCATION IN CUBA.

THE condition of science and education generally in Cuba is, according to the *Eco Cientifico de Las Villas*, most flourishing. All the faculties exist in the University, and studies can be carried on there in all branches up to the degree of Doctor. Each province has an institution for secondary education. The clinical and obstetrical departments of the hospitals are most satisfactory, and there are numerous practitioners of ability. Surgery has of late made rapid strides, all the most serious operations being now skilfully performed on the island. There are also numerous scientific and professional societies in a flourishing state.

A. K. C.—1. The charges appear perfectly reasonable.—2. Whether the result is to be regarded as quite satisfactory is a question which must depend upon the whole of the circumstances of the case, and these are not given.

THE BRUSSELS DEGREE.

To the Editor of THE LANCET.

SIR,—The M.D. degree is now so frequently sought by British practitioners, owing to the close regulations in regard to residence in force at our English and Scotch universities, that I am induced to give a short account of the last examination.

As is generally known, English medical men have the privilege, on presentation of their diplomas, of taking the three "Doctorates" at once, instead of at a year's interval between each. Candidates must be prepared to spend a fortnight, or even more, from the Saturday specified, in Brussels, although sometimes ten days are sufficient. The time may be shortened by deferring arrival until Monday or Tuesday, if special leave be obtained. There were sixteen candidates on the last occasion, all English. Of these, five were rejected at the first Doctorate, and one each at the second and third; so that nine, or little more than one-half, passed for the complete degree. This is about the usual average of late years. Probably two-thirds of the candidates were recently qualified; the rest had been in practice for some years.

The examination is entirely *viva voce*, unless by special arrangement. All the candidates are usually present in the room, although four only are taken on one evening. A little knowledge of French is helpful, although an interpreter is provided.

The First Doctorate is by far the hardest of the three, and will, in my judgment, for thoroughness and fairness compare well with most English examinations. Medicine, Therapeutics, Pathology, and Mental Diseases each occupy a quarter of an hour. As a rule, a subject—e.g., Pleuro-pneumonia, Dysentery, "Chronic Myelitis," Cancer of the Stomach, &c.—is taken, and the candidate is kept on that subject during the time specified, unless he shows marked ignorance, when a second subject is given him. One is expected to expound in detail the symptoms and course of the disease, "as if you were giving a lecture," and the causes for the various phenomena. "Go on," "And then?" and "Why?" are repeated at frequent intervals.

In Therapeutics also the test is a thorough one. The examiner, who is very gentlemanly in his manner, expects a full knowledge of the physiological action of the better known drugs, is especially particular as to the *modus operandi* of purgatives, diuretics, &c.; he is also well acquainted with recent discoveries and views, and asks often the properties of drugs which are only to be found in our most recent text-books, such as cocaine, nitro-glycerine, &c. Such a work as Mitchell Bruce's Materia Medica (Cassell) is, however, quite sufficient.

Pathology is the rock on which most make shipwreck at the First Doctorate. It is no secret that this examiner is the terror of candidates, partly because of the minute knowledge of morbid anatomy and of microscopic work he requires, and partly because of his manner of examining. Mere cramming of the subject is quite useless. Such a book as Green's Pathology must be studied repeatedly, until the various morbid appearances are graphically present to the mind's eye of the candidate, and he must not be put to confusion by rapid cross-questioning and frowning looks. Parasites form also a favourite topic.

Mental Diseases are but lightly treated. The examiner for this subject asks also on general medical science, methods of diagnosis, &c. On the whole, the First Doctorate is a fair, though rather difficult, test, at which many men fall on their first attempt.

The Second Doctorate embraces Surgery, Medical Jurisprudence, Midwifery, and Hygiene. The first of these is not generally difficult; it is, however, unequal. There is little or no surgical pathology; general and regional surgery must be familiar to the candidate. Midwifery is thoroughly, and rather scientifically, entered into. Besides one of our best text-books, some acquaintance with a French manual would be helpful. Such questions as the different kinds of fœtal movements, external and internal ballottement, &c., are required in some detail, and the variations in the fœtal pulse according to sex is a favourite point. For Medical Jurisprudence and Hygiene it is almost impossible to prepare. A general acquaintance with these subjects is undoubtedly required; but the questions asked must be answered by common sense. Cremation, the general effects of climate in their widest sense, the effects of wind on soil, the period of incapacity for work after injury, &c., are not subjects to be found in English text-books, and, as a fact, common sense and a little medical experience suffice to answer the questions.

The Third Doctorate is entirely practical. Clinical Surgery is under M. De Roubaix, Surgeon to the King, a veteran whose eye and hand are quick and steady as ever in his art. He practises antiseptics in a modified form. Both in Surgery and Medicine cases have to be examined in the hospitals, two in each subject. There is no difficulty in this to men accustomed to practise. Little of the minuter methods of diagnosis is required. Operative Surgery is rather hard. Three operations have to be performed: one ligature of artery, such as the radial, femoral, or lingual; one amputation of finger, or a Chopart, &c.; and, lastly, catheterism, castration, resection of middle third of clavicle or of part of a rib. Dissections are also required; and here a pretty accurate knowledge of the regions is needful—the cutaneous nerves, order of tendons, especially the lymphatic glands and vessels, also cranial nerves, &c. The severity of the recent anatomical test was unlooked for by most of the candidates. Practical Midwifery with the mannequin is fairly carried out. Some ordinary facility in operations is required.

Thus it will be seen that a fair all-round test is applied. At the same time it is the Medicine and Pathology examiners who reject the men. Those who pass MM. Crocq and Wehenkel will most often somehow get through the remaining Doctorates. Many men go over to Brussels with little idea of what they will find; and I heard bitter complaints from some who had put faith in advertisements which had appeared in England.

I hope the day is not distant when one or more of our own universities will give to English students an examination something like this. Let it aim at a high standard in all branches, let the fee be a substantial one, but let it not require that one condition which to the busy practitioner is unattainable—residence. Is it no loss to the British Universities (if they be deaf to any higher motive) that so large a number of our own men, and men not slothful or ignorant of their profession, should be driven to spend their money for a foreign degree?

I am, Sir, yours faithfully,

Finsbury-circus, April 4th, 1885. HINGSTON FOX.

*** We are frequently asked about the examination for the degree of Brussels. The above letter will supply the information desired. It cannot be considered that the ordeal quite realises that which an examination for a degree should be. There is no examination in Arts; none in Anatomy and Physiology proper. There is no written examination, and no thesis. Even in Medicine, which seems to be the subject in which the examination is most severe, it appears to be by no means exacting.—ED. L.

Virtus vincit invidiam.—Our correspondent is thanked for his letter; but we think it would be better to postpone any remarks on the subject for a short time, till we see what steps are taken to remedy the grievance.

Dr. Horace Swete's (Worcester) letter will appear next week.

"IMPROVED FRACTURE BOX."

To the Editor of THE LANCET.

SIR,—In your issue of the 11th inst. a special form of splint is described by Mr. Foley, Medical Officer for Midleton Hospital, as a new invention. Permit me to state that I have used a splint similar to his for two years, but with an addition, which I consider important—viz., the use of plaster straps, attached to the fractured limb, and to the end of the splints, to act as a counter-extension, extension being made by plasters, below the seat of fracture, and attached to a ratchet at the lower end of the splints. The apparatus is simply box splints, with the addition of plasters and a ratchet for extension. In shape my apparatus is similar to Mr. Foley's, without having perforations in the pieces, which is an improvement. My idea was to have a box splint, able to keep up extension and counter-extension, in oblique fractures of the leg, and for compound fractures. At the time I carried out my ideas I mentioned the fact to Professor Chiene of Edinburgh, who may, however, have forgotten about the matter.

I am, Sir, yours faithfully,

Fife, April 13th, 1885. T. GOODALL NASMYTH, M.B., C.M.

THE BIRTH-RATE OF ILLEGITIMATES IN PRAGUE.

AMONG 7031 births in Prague there are 3762 legitimate and 3339 illegitimate. It is a noteworthy fact that the death-rate among the illegitimate does not greatly exceed that which prevails among the legitimate.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Allow me to point out a slight clerical error in my letter of the 4th inst. As it stands in your issue of the 11th inst. I am made to say that the Lieut.-Governor of Guernsey, the bailiff of Guernsey, the chief constable of Guernsey, *and* Dr. Le Page *each* received a copy of the *Journal*. The clause should run:—"and the following officials: the Lieut.-Governor of Guernsey, the bailiff of Guernsey, the chief constable of Guernsey. Dr. Le Page received a copy of the *Journal*." I am anxious to prevent any possible misunderstanding on this point.

I am, Sir, your obedient servant,

Guernsey, April 13th, 1885. J. AIKMAN.

DISINFECTING CHAMBERS.

To the Editor of THE LANCET.

SIR,—I shall be glad if any of your readers will be good enough to inform me which are the best disinfecting chambers now in use and where to be seen. I am, Sir, yours faithfully,

April 14th, 1885. MEDICAL OFFICER OF HEALTH.

HAMILTON COUNTY, KANSAS.

A CORRESPONDENT at Aubery, Hamilton County, Kansas, writes to us pointing out the advantages which the county affords as a place of residence for dipsomaniacs who are wishful to get rid of their craving. It is against the law of Kansas to sell, or for the railways to carry, any intoxicating liquor, of which, our correspondent states, there is not a pailful in the county. Land is cheap, and there are many methods of employing capital, in the raising of stock, &c.

Haslingden.—We have no further information on the subject.

Mars.—The question was answered in our issue of March 21st, p. 547.

A WARNING.

To the Editor of THE LANCET.

SIR,—I learn that an impostor is going about the country bearing a card and recommendation from me. He has victimised members of the profession by representing himself as a doctor's son. Let me warn your readers against anyone showing a card in the name of

Southborough, April 13th, 1885. E. PAGET THURSTAN, M.D.Cantab.

To the Editor of THE LANCET.

SIR,—I should like to warn my professional brethren against an impostor who says he is the son of an Indian surgeon. He is about 5 ft. 8 in., thin, with light-brown hair and mutton-chop whiskers. He professes great piety, and cannot get a situation as photographic operator as he refuses to work on Sunday. I unfortunately gave him a frock-coat and some blue and white shirts with turn-down collars, and entrusted him with some money, which he stole, together with an overcoat which he begged another person to lend him. He imposed on me by means of a visiting-card of Dr. Thurstan, who knows nothing of him. I am, Sir, yours truly,

Woolwich, April 14th, 1885. T. MAXWELL.

THE PARASITIC NATURE OF MELANOSIS.

To the Editor of THE LANCET.

SIR,—A reference to the "Medical Digest," Section 1670 : 3, will show that in your pages in 1867 the experiments of M. Gorgon upon the inoculability of melanosis were commented upon. Since that time, until your note upon M. Bard's discovery in THE LANCET of April 4th, p. 633, no observations upon the subject have caught my attention.

I am, Sir, yours obediently,

South Hampstead, April 4th, 1885. RICHARD NEALE, M.D. Lond.

GLYCERINUM ACIDI CARBOLICI IN DIABETES MELLITUS.

To the Editor of THE LANCET.

SIR,—A patient of mine suffering from diabetes mellitus in which the thirst was very excessive, I tried every known remedy to alleviate it without effect. I ordered glycerinum acidi carbolici in five-minim doses, and it relieved the patient at once. At present he is in good health, the urine being almost free from sugar.—Yours faithfully,

Rathfriland, March 31st, 1885. J. MCAVOY, M.D.

"AN OLD MEDAL."

To the Editor of THE LANCET.

SIR,—Is it not probable that the medal referred to by your correspondent, "M. U.," was struck previously to the enclosure of the gardens, which, to avoid inconvenience, was postponed until a sufficient number were circulated? I am, Sir, yours faithfully,

April 14th, 1885. M.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Surgeon-General Stewart; Mr. Henry Lee, London; Mr. Reginald Harrison, Liverpool; Dr. Geo. Oliver, Harrogate; Dr. Rben. Watson, Glasgow; Dr. Farquharson, London; Dr. Taylor, Anerley; Messrs. Cassell and Co., London; Mr. Blok, London; Mr. Brown, Cardiff; Dr. Joseph Bagdanik, Biala; Mr. E. Shoesmith, Rochdale; Mr. Radley, London; Mr. J. G. Thomson; Mr. Rawlings, London; Mr. Carmalt Jones, London; Mr. Mumford; Dr. H. Swete, Worcester; Mr. Wale, Maidstone; Mr. T. G. Nasmyth, Foulford; Dr. Thurstan, Southborough; Mr. Blackett, London; Mr. Alkman, Guernsey; Mr. J. W. Beck, London; Mr. A. J. Cook, London; Mr. A. G. Auld, Wick; Mr. W. C. Steele, London; Mr. J. N. Cook, London; Mr. H. B. Hewetson, Leeds; Mr. W. G. Lacy, London; Dr. Casey, New Windsor; Mr. C. Morris, Chester-le-Street; Mr. Drew, Wellington, N.Z.; Dr. Acland, Oxford; Dr. Sinclair, Dundee; Mr. N. C. Dobson, Clifton; Dr. Brett, Watford; Dr. Althaus, London; Deputy Surgeon-General Fowler, Bedford; Mr. Berdoe, London; Mr. Haggard; Mr. C. N. Williamson, London; Mr. Hutchinson; Mrs. Bourchier, Sheffield; Mr. Edwards, Chester; Mr. Cardew, Teignmouth; Messrs. Brown, Davis, and Co., Glasgow; Dr. S. C. Griffith, London; Mr. Maythorn, Biggleswade; Mr. Hulme, Birmingham; Mr. Selwood, Winchester; Dr. Weaver, Southport; Mr. Spitzty, Canonbury; Messrs. Norman and Co., Cheltenham; Mr. Twyford, Hanley; Mr. Bigg, London; Dr. Chafer, California; Dr. Hickie, Birmingham; Messrs. Grinley and Co., London; Mr. Jenne, Halesowen; Mr. Hill, Clifton; Messrs. Riddle and Co., London; Mr. Beloe, King's Lynn; Mr. Clark, Bristol; Mr. Heywood, Manchester; Messrs. Whitehead and Co., Manchester; Mr. Crews, Truro; Messrs. Wilson and Stockholme, Bury; Mr. Negan, Canterbury; Mr. Oldham, Monsall; Dr. Burham, Surat; Messrs. Clay and Sons, Manchester; Mr. Carmody; Mr. Gravatt; Dr. Buchanan, Glasgow; Miss Smith, Plymouth; Mr. Beckton, London; Mr. Giles, London; Messrs. Kegan Paul and Co., London; Mr. Birchall, Liverpool; Mr. Sloane, Bradford; Mr. Paberner, Wigan; Mr. Sharpe, Walsall; Mr. Blunt, Brighton; Mr. Hodgson, London; Mr. Freeman, London; Mr. Paul, Liverpool; Mr. Sargent, London; Messrs. Bell and Co.; Mr. Craske; Mr. Hammond, Clifton; Messrs. Shanks and Co., London; Dr. Money, Rickmansworth; Messrs. Hawkes and Co., London; Mrs. Tillett; Quæstor; Mechanic; Rest; H. C.; Mutare Sperno; Mars; An M.D. of New York; Haslingden; J. G.; The Matron, Eston; W. C., Bath; Sanitas, Hyde; G. S. D.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Hind; Mr. White, Bayswater; Mr. Cane; Mr. Peirson, Ipswich; Mr. Deane, Cawnpore; Dr. Hawkin, Manchester; Mr. Bird; Dr. Adam, West Malling; Mr. Vines, Shepton Mallet; Messrs. Dickson and Russell, Edinburgh; Mr. Kinder, Leicester; Mr. Reynolds, Derby; Mr. Young, Hawkhurst; Mr. Watson, Glasgow; Mr. Brown, Pimlico; Mr. J. Barker, London; Mr. Skinner, Winchelsea; Mr. Cotterell, Bicester; Mr. Stack, Dublin; Mr. Parker, Sidmouth; Mr. Micharlescue, New York; Miss Wade, Chorley; Mr. Symons, Dumfries; Mr. Dolby, Cannock; Mr. Morris, Swansea; Mr. Duke, Freshwater; Mr. Hunter, Turnham-green; Miss Bretherton, Preston; Mr. Sloane, Bradford; Mr. Bridgman, Barnstaple; Mr. Eberle, Thirsk; Dr. Harding, Wigglesea; Mr. Smallman; Mr. Shepherd, Putney; Mr. Stilliard, Birmingham; Dr. Gledhill; Z., Newcastle-on-Tyne; Medicus, Halifax; G., Southport; Surgeon, Buckfastleigh; Delta, London; Lady Superintendent, Bangor; M.D., Wigan; F.S.A., Wye; Omega, Pontnewydd; M.B.; Medicus, Glasgow; Beta, Frisington; T. W. L. B., Great Yarmouth; Boon, Hulme; C. F. D., Bury; H. O. M.; Medicus, Leicester; D., Cradley Heath; H. B. G.; Drax, Dublin; The Secretary, Carmarthen; W. G., London; M.D., London; Physician, St. Lawrence; B. B.; Medicus, St. John's Wood.

Scotsman, Aberdeen Herald, Hertfordshire Mercury, Burton Advertiser, Southport Visitor, Stirling Reporter, &c., have been received.

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

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Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.